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AMERICAN COUNCIL ON EDUCATION

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The Fifteenth Annual Meeting

THE Fifteenth Annual Meeting of the American Council on Education will be held in the new building of the Brookings Institution, 722 Jackson Place, Washington, D. C., Friday and Saturday, May 6 and 7, 1932. There will be three sessions: Friday morning, nine-thirty to twelve-thirty; Friday afternoon, two to four-thirty; and Saturday morning, nine to twelve-thirty. Delegates will be entertained at luncheon on Friday between the two sessions, at the Cosmos Club.

At the Friday morning session annual reports of the Executive Committee, of the Treasurer, of the Director, and of the various standing committees of the Council, including the Committee on Problems and Plans, Committee on Personnel Methods, Cooperative Test Service, Modern Language Study, Committee on Educational Finance, etc., will be presented.

The other two sessions will be devoted primarily to a symposium on the general subject "Who and What Determine the Major Policies in Professional Education in America." Secretary Ray Lyman Wilbur will open the discussion for professional education in medicine; Dean Luther H. Weigle of Yale University will open the discussion for professional education in theology; Hon. James Grafton Rogers, Assistant Secretary of State, will open the discussion for professional education in law; President William E. Wickenden of Case School of Applied Science will open the discussion for professional education in engineering. Mr. Will Shafroth of Denver, Colorado, Adviser of the Section of Legal Education of the American Bar Association, and others will join in the general discussion. It is hoped that the discussion will show how far the various professions organized in professional associations, how far licensing boards and other governmental agencies, how far organizations of the professional schools,

how far economic conditions, how far the raw material available in the caliber of students, and how far the universities themselves, shape the major policies of professional education and determine standards and the increase or curtailment of the number of men and women prepared for the professions.

The election of officers for the year 1932–33 will take place at the close of the morning session on Saturday.

Under the Constitution each constituent member of the Council is entitled to be represented by three official delegates, and each institutional member of the Council is entitled to be represented by one official delegate.

The meetings will be open to the public and any one interested in education will be welcome as an auditor.

A Program for Tomorrow[1]

WE ARE gathered tonight to think about American education. Our changing times compel us to consider it carefully as a fundamental instrument of our civilization. In the midst of unrest, multiplied by the easy contagion of troubled minds, it is for us to pause and take a calm view, to make an accurate appraisal of the strategic place of education in American life, and to readjust its operations.

HISTORY AND CURRENT CRITICISM

There is no better way to appreciate the unique greatness of American education than to view its past, and perceive its fine responsiveness to the expanding and heightening aspirations of the American folk. How *far* we have come through education!

There is no better way to comprehend the inadequacies and the defects of American education than to compare what we have done with the hopes we have held for service to civilization. How *far* we have yet to go through education!

Our past makes us praiseful and appreciative, and our present critical and somewhat unsure. Yet it is only out of a past projected through the present to a future, only partially predictable, that we can discover accurately the burden which America once more places upon its schools. What then is to be the educational program for the bearing of tomorrow's burden?

FUTURE PROGRAM A PROJECTION

The educational program for tomorrow will not be so new that it will be startling or revolutionary; nevertheless its consequences may and ought to be tremendous. Tomorrow's program will be born of today's practice, criticism, and reconstruction as today's was born of yesterday's. Education

[1]Address delivered before the Department of Superintendence of the National Education Association, Washington, D. C., February 23, 1932.

will improve as it has always done in America, as a continuous process, now accelerated, now retarded, continually revalued and continually redirected.

The rapid change in educational methods in America is not a discredit to the teaching profession as some laymen suggest. It is a fact to our credit. It expresses a brave effort to meet the new problems of a shifting world and to incorporate in teaching and administrative procedure our new scientific knowledge of human behavior.

THE DEMOCRATIC SPIRIT CONTROLS

There is one large factor which endures and will continue to endure. It hovers over the whole scene of American life and education. It is the persistent democratic aspiration of Americans to give themselves a more kindly civilization and to train a nation of cooperative men and women to operate it. The corner stone of tomorrow's program is this democratic aspiration.

DEMOCRACY A WAY RATHER THAN AN END

It must be remembered at the outset that a democracy focuses its attention on a way of going rather than on a fixed destination, and that it knows better the manner of life which it wishes to lead in its social journeyings than it does the end of its journey. Democracy is a system of aspirations, of reigning values, and essential procedures. These must be incorporated in human carriers or good citizens if they are finally to become part and parcel of the social organization process which we call American civilization. And it is through the educative process of the school and other institutions that we shall transform raw humans into civilized men and women.

THE EDUCATIVE PROCESS IS CENTRAL

The central item in tomorrow's program of education is the educative process. All other items are secondary, being either supplementary or reinforcive. It must be considered first, and the other items afterward. Until we know how we shall want to change or educate men and women we cannot

organize, administer, or supervise, arrange our health program, provide the needed physical facilities, or equip the schools with aids, material or human.

Since there is no time to deal with all the aspects of needed reform we shall consider the prime aspect, the educative process, discussing only inferentially the other changes which must go with it.

1. *Motivation: Social Service and Individual Success*

The first step in the improvement of the educative process is to democratize the psychological processes which constitute it. We must make the school's main business that of developing an effective social person rather than a successful individual. The fruits of education must be more largely public than private. We can justify taxing all for the education of all only when the results are more social than personal. This is not a new conception in theory but its full and effective acceptance in practice will be new, and its consequences far reaching. It will change radically the traditionally individualistic and academic bent of all schools below the senior college and the professional schools, that is of common liberal schooling.

The current school too largely gains its successes by using individualistic motivations. It stresses unduly personal success and competition, where it ought to place more emphasis on the services and satisfactions which come from achieving the social objects of the group, whether that group be a team, a class, a school, a club, a neighborhood, a community, a state, a nation, or a humanity. The new social psychology gives us ground to believe that the thrill of doing one's part in a larger task may be made as powerful a motive for work as doing the whole of a small job better than someone else. In the school of the future the altruistic thrill of participation should be used more often than the self-satisfactions of egoistic successes in ranking one in the class, in having better marks, accumulating more credits, more rapid promotions, more honors, more degrees than the other fellow. The pursuit of school distinctions which involve odious com-

parisons with most of our neighbors is strong motivation for sharpening the intellectual fangs and claws of a few, but it discourages the many and leaves all who learn in such a regimen without adequate education in the appreciative ways needed for democratic cooperation.

The school system should gradually get rid of the whole artificial organization of egoistic motivations which have had a long traditional use amongst us, displacing them one by one as the profession learns how to use stimulations and rewards which are social rather than individual, therefore personally more enduring and satisfying. The aim is not to make the school an isolated heaven of perfect social motives which would unfit its human products to live in an imperfect social world from which a sensitive soul would finally seek to escape. The aim is a new relative emphasis, the gradual displacement of a poor motive by a good one, the steady substitution of a good citizen for a bad or indifferent one.

2. *Scope: Total Humanization and Intellectual Achievement*

What has just been said about the new emphasis and quality of school motivation, suggests another far reaching implication already sensed by effective and experienced teachers. The school must be concerned with the whole personality of little men and women, each and every aspect, and must neglect none.

The school's new approach thus becomes wholly human. The body and the mind, the soul and the intellect are alike its concern, not at separate moments but all at once as coincident aspects of a healthy, normal, integrated personality.

The school as an institution originated in a narrow task—a merely intellectual one. Pupils were fortunate if their schools rose above an informational function. Beginners were in fact not much informed; they were absorbed in gaining the tools for acquiring information. We have not yet wholly escaped the momentum of that narrow tradition though we have been steadily breaking away, enlarging our concern with more and more of human nature. The new

program makes the whole jump. From now on we are concerned to aid children and youth to become wholly human, to develop every aspect of body and mind, intellect and soul, to relate and integrate feeling, knowing and doing, to perceive the values of character, and the efficiencies of action or expression as equally important with the full rational uses of mind.

The acceptance of such a statement has far reaching complications for all moments of the period of common schooling, wherein liberal education with its humanizing or civilizing purpose reigns, that is from the nursery school to the end of the junior college.

3. *The Broadened Reach of the Curriculum*

The broad curricular offering of the school will remain. The public school is not going to retreat to a narrower curriculum, of either old type or new. The enriched curriculum is here to stay. The school that is to train for life cannot be narrower in resources than the civilization it serves.

From primary grades to junior college years it will widen so as to touch all the problems of our time. It will give understanding of all the aspects of our present and our oncoming life. It will foster appreciation of the social tools through which individual men become socially cooperative—the institutions in which each and all of us must learn to play an effective part.

Nothing that is a concern to American civilization can be of less concern to the American school. Economics and technology will be just as respectable as school studies as they are insistent as social affairs. Educational valuations will tend to coincide with genuine social valuations. In the new program the socially important cannot be educationally inferior, suffering underemphasis or neglect.

In all the reconstruction of the curricular offering, the emphasis will be put on the meeting of life as it surrounds us then and there. The past that persists in the present and is likely to continue in the future is still history but it is part of a vital present. The culture that was European before

it became American is still European but it concerns us because it is now American. The problem of another land and its people is still their own, but if their affairs touch our own American life spiritually or economically it is vitally our problem and we must be concerned with it.

America, with its present and immediate future, is conceived in no narrow national sense nor as a narrow slit of time. It cannot be so dealt with in real living. But the emphasis here placed on our own American civilization and our own time, broadly conceived, is meant not as an excuse for detailed study of everything, but as a fairly stern standard of selection and omission in curriculum-making which will give no warrant to the retention or inclusion of subject matter which has only a remote connection with the student's genuine and urgent needs.

4. *Fewer and More Inclusive Subjects*

Nothing that is implied in an enriched curricular offering should give warrant to the idea that there will be a still further multiplication of studies. On the contrary, the curriculum with a wider reach over contemporary civilization will consist of fewer and more inclusive units of study. They will organize knowledge into intellectual vistas, which emphasize rather than exclude into learning approaches which will permit the student's mind to move as freely as curiosity and thought impel him, down all the highways, the crossroads, and the side lanes of thought-adventure and learning.

This is the meaning of the oft repeated attempts of the elementary school to approach its work in larger and more flexible units, such as in nature study, civics, language study, and industrial art. This is the significance of the urge behind the secondary school when it labors to introduce science as general science, to correlate the social sciences as social study, or to teach general literature. This is the meaning behind every orientation, gateway, comprehensive survey, or general introductory course now offered in the college system.

It means more continuous and responsible study of main

things from the nursery to the end of secondary education, where liberal schooling concludes its provision for seeing the world as a related whole and places the student before the many gateways to higher specialization that he may make a definite choice of the special service he will render to mankind.

In liberal education we are about done with the futile attempt to make each student a jumbled imitation of a whole university faculty of specialists. Every great university specialist that I know is first a man of culture and then a specialist, first a virile and sympathetic character and then a skilled and knowing expert. We have been working hind end to, and the new program will reverse the process. Hereafter we shall begin with breadth and end with pointedness, for breadth is something more than a vast collection of points and pointedness requires something broad enough to be brought to a point.

5. *School Tasks Psychologically Graded*

The problems of the child's expanding life must be graded to his ability. This is the only sense in which grading at school means anything vital. Each day's task must be above the child's immediate grasp but still within his growing reach. Only thus can life be kept dynamic. But no days task should be a monotonous routine of repeated tasks, conquered days before. Tasks too difficult are discouraging, and those that require no intelligence are boring. And boredom and discouragement are twin killers of human drive or interest.

The present method of school grading, as we know it, ought to be taken out of the daily consciousness of public, parents, children and fellow pupils, and whatever is valuable in recorded grading and appraisal, particularly that which we have acquired through new scientific techniques, should be put into the professional and confidential records of the school as an aid to diagnosis, guidance, and the redirection of the process of education.

A perpetual individual record card full of pertinent information of all types is a better record than a mere set of

term marks, and parents will be better served by a diagnostic and advisory letter based on the perspective of a whole career than by a routine report card based on the term's work.

The older system of grading and reporting was born of the earlier school system which tried to treat all children not equally but identically. It was the offspring of the competitive motivation of the older school which tried to spur every child by competitive ranking, some through the satisfactions of victory over others and a far greater number through the personal shame of various degrees of failure. We now know that the sense of successful achievement is more powerful than that of failure in evoking and directing a persistent creative energy of the mind and spirit, that reward is better than punishment as a psychological method in learning and teaching.

6. *Adjustment to Individual Differences*

The psychological grading of school tasks will at once bring to mind the greatest signal fact of our new scientific knowledge of human beings, that is, their individual differences. The new program must be fully based on that fact, but with a right and true attitude behind its applications.

It is not to be assumed as has often been the case in the past that the individual differences which confront us in the school room are largely to be accounted for in terms of natural inheritance. That is too simple a way to dismiss many of the facts: it leads to grievous mistakes. The limitations of a child may, indeed, be due in the first instance to certain inherited limitations, but they may also be due to an under-privileged institutional environment operating powerfully in the pre-school age or exercising a constant influence parallel to school life.

Whatever the facts are, and they are difficult to know accurately in any instance, it is safer to err on the side of ascribing too much to environment and too little to heredity, than vice versa. When heredity is not unduly summoned as an explanation teachers are prone to exhaust all the

versatile techniques they possess and seek some correction of obstructing conditions outside the school life. This is far more fair to the pupil and tends to bring the school into cooperative relation with the other educational institutions and forces which affect the development of youth.

When the profession recognizes that actual differences in children are often due to the accidents of early or present environment, to ill health, and to acquired interest or disinterest, then no deadly fatalism enters into the judgments of teachers. Whatever nature has done to limit a child, we can not help; whatever environment has done, we may ameliorate. And it is better to assume too much where we can be of help, than too little. Practical justice lies on that side of error.

In our adjustments to individual differences, it is necessary to set up a flexible standard. The simple standard of the new program is the one which asks with regard to the next step in the teaching of a child: Will it conduce to the pupil's greater personal development? If the answer is "yes," the step is right. If it is "no," the step is wrong.

We may then arrive at judgments and procedures that will shock our academic sensibilities, as when a girl is allowed to forego the next course in mathematics or a boy, more interested in modern life than ancient, is allowed to proceed with his interest without repeating a preceding course in which he may have failed dismally. But the business of the school is to educate as far as it can. And it is conceivably better to get more education in a lopsided way than very much less in a regularized way.

What we do now is something mechanical and rigid. When the result, in certain extreme cases, is too dramatically bad for human impulses and good judgment to tolerate, we make an exception. We do this when we promote on a basis of years or subjects. We do it again in making out the requirements and elections for students' study cards. It is all a round-about pedagogical process which corrects only the major injustices. We should abandon the system altogether in favor of direct personal judgments which are

likely to achieve minor as well as major justices. Initial right treatment is better than wrong treatment corrected.

Fortunately the trend of thinking and practice are generally favorable to the new attitude. We regard our schools, particularly those which stretch across the compulsory school attendance age, as periods of enriching experience wherein the best development possible is the goal, and we no longer make students reiterate their failures by repeating a course, when more is to be gained by going ahead with another. Considerable investigation shows that our dogmatic assumptions about the preparatory value of courses which we make prerequisites are wrong as often as they are right, and half wrong far more than half the time.

It is probable, too, that segregations of classes on the basis of ability will not be so popular as was once the case with us. The intellectual advantages have not proved to be so large as we had expected and the unsatisfactory emotional consequences have been far greater than we had anticipated. Probably a school class should be a society as mixed as cooperating groups are in life generally. Leadership and followership alternate in every group, and they are alternate roles in every personal life, shifting with the situations, problems and persons present. Careful observation of the way in which the world actually carries on in a democratic society confirms the policy and it may well be adopted by schools as a way to give persons with different qualities a chance to practice the skills of leadership and the appreciations of followership. At any rate the world seems to be in need of just this sort of social education.

7. *Self-Education a Continuing Process in School and Life*

Teachers do not actually believe it, but in fact they are prone to act in their dealings with children as though education begins and ends with schooling. How otherwise could we feel that we have an overcrowded curriculum. All we have is overpressure due to a badly constructed curriculum.

From now on the school must be regarded as mingled

with life, fore and aft, port and starboard! Education must hereafter be regarded as covering the length and breadth of life itself. The school is only the swifter and more controlled central current of education. Education begins informally before the child enters school and, if the contemporary movement for adult or continuing self education has any genuine significance, it goes on long after schooling is over!

To conceive of schooling as a mere part of the whole and continuing process of education will do more than correct some of our hurtful, false assumptions, such as worrying unduly over the fact that a child does not learn here and now, and as fast as we wish, all that we have set up for him to acquire on the basis of some average or standardized expectation.

It will put the emphasis on learning rather than teaching. Schooling will become mere self-education under teacher stimulation and assistance. In fact, the teacher under the new regime will become a supervisor of learners. What a revolution would result from this changed attitude and point of view! No need for teachers to be omniscient—merely omnipresent! Teachers and learners would then be permitted to learn something together. The teacher's ignorance would not have to be concealed, shamefully, and too often deceitfully.

The effect on the pupil would be even greater. He would have a new responsibility and feel a new challenge. The initiative would be his. The responsibility would be his. With each passing month and year his self-reliance and his capacity for independent inquiry and study would increase. There is not one of these qualities that does not represent a highly desirable trait in the citizen. Finally, the transition from schooling to adult or continuing self-education would be bridged more easily than it ever has been before, and the ominous gap between the education which the school gave and that which life now needs would not frighten men. Self-education can keep up to date, while schooling probably never can.

With this new conception of the school's process we might be tempted to ask why the number of students assigned to a teacher should grow steadily less and the cost steadily more from the primary school to the college. It might seem that the better trained, the more mature and independent the student, the greater service he could render himself in a process which is mainly one of self-education.

8. *A New Type of Teacher and Teacher Training*

And as a last item that can now be mentioned in a program for tomorrow, let me say that one has only to review the various concepts laid down in this program for tomorrow's education to realize that we shall need a new type of teacher and a new kind of professional education for his preparation.

Hereafter the teacher's human interest, sympathy and understanding will be just as important a part of his equipment as his academic and technical training, and probably more fundamental. In the best modern and democratic sense the new type teacher must be a thoroughgoing humanist regardless of his special field of scholarship. He will not be so much a teacher of subjects as a moulder of men and women. He will need to be a civilized person if he is to bring all the resources of civilization to bear upon youth, which is to say he will be liberally educated.

There are too many academic specialists in our public schools who know very much about a little field of study and nothing much about the wide ranges which make up the rest of life. And unfortunately they have been given preferment in appointment, promotion, and remuneration. And with what result? Steadily through the years departmentalized teaching has been introduced further and further down and it has not been particularly good for the child to be treated in uncorrelated bits. Effective humanization of a child requires that every teacher that influences him have regard for his whole personality. In no other way can education fully humanize.

Now it must begin to be clear that teacher training will need to be reorganized. The teacher himself must be a

characterful person, interested in people as well as in books,—a man of *this* world, in the best sense and not an academic recluse, avoiding and escaping it, standing aloof from and disdaining it. The whole world is open to him nowadays through books, conversation and the other means of communication which make vicarious experiencing more largely possible than ever before.

The teacher should be liberally educated in all the arts and sciences. He does not need to "know it all," but to appreciate it all. Hereafter no teacher should be admitted to an American teachers college who has not completed his secondary education—the period of liberal schooling. And the quality of that liberal education should be scrutinized to see that it is a liberal understanding of the twentieth century that has been acquired and not merely that of the nineteenth, eighteenth, or seventeenth century worlds.

If I were the state commissioner or superintendent of public instruction, I would not license or certificate a teacher for my state on credentials from any other state without applying the same rigid test of liberal outlook on our current civilization.

It is time enough to begin academic concentration and specialized training with the senior college level. Specialization has no place below.

What professional training in the narrower technical sense ought to be is too large a subject for present discussion. Only a few large hints can be given now.

It should certainly not aim more or less exclusively at the mere high mastery of a single aspect of knowledge and the collecting of the pedagogical techniques for transmitting it at only one restricted grade or level of education. Certainly, at the outset, the prospective teacher ought to see the place of the institution of education in our whole scheme of civilization. Certainly he ought to see all the aspects and parts of the educational system in a related and cooperative whole. Certainly he ought to know what other kinds of educational folk are doing under our system of subdivided services.

I am fearful of certain conspicuous trends among the teacher training group of professional educators. Of all educators they should have fewer of the diseases of academic scholars and more of the virtues of humanized teachers. But just now they are advocating more pay and more promotion for mere training of the type we do not most need. Just now they are playing into the hands of the ancient foe—the specialists of the academic life, trying to revamp their curricula so as to make entrance to candidacy for academic degrees easier for their graduates so that their institutions will be, not educationally and socially more useful, but academically more respectable. They have so many new problems to solve, and so many new efficiencies to meet, that one wonders how they can afford to be so concerned about something that academicians are growing less concerned about every day. It seems a strange reversal of conditions. Most of all we need the cooperation of the teacher-training profession if the educative process is to be the potent spiritual instrument of American civilization in its program for tomorrow.

HENRY SUZZALLO,
The Carnegie Foundation for The Advancement of Teaching.

February 23, 1932.

Education, the Nation's Safeguard[1]

NO WORDS of mine can express the necessity of universal education in a country like ours as impressively as do the words of George Washington. In his farewell message addressed to the people of the United States near the end of his second term as President, he said:

"Promote, then, as an object of primary importance, institutions for the general diffusion of knowledge. In proportion as the structure of a government gives force to public opinion, it is essential that public opinion should be enlightened."

I am sure that every member of this assembly accepts the statement of the founder of this republic as a commission from a great commander. It lays upon each of us the obligation to do whatever is necessary to promote education in times such as these, when all the institutions of our national life seem to be in process of re-evaluation and reconstruction —none more so than the educational system.

The command of George Washington is even more urgent today than when it was first issued, for we find the governments of all countries giving ever-increasing attention to education. We observe the revolution which brought communism to Russia and find that schools flourish under the new régime as major instruments of social control. We observe the dictatorship of Italy, removed in theory and practice as far as possible from communism, and we note once more that education is the instrument used by the dictator to guide youth into the new ways approved for national life. We see the ancient civilizations of Western Europe, crippled by war and disrupted by economic stress and storm, opening new schools for the common people, making higher education free to increasing numbers, looking to the future for happier times when educated democracies shall be better able to cope with the problems of organized society. Even the Orient,

[1] Address before the Department of Superintendence, Washington, D. C., February 22, 1932.

aroused from its long lethargy, is organizing schools for the masses, seeking through education to overtake the Occidental world.

When all the peoples of the earth are beginning to realize that a free universal education is the only sure guaranty of civilization, shall we falter and withdraw from an educational program which has been one of the characteristic features of our democracy? There can be but one answer to that question. We are gathered here today to counsel together for the better organization and enlargement of American education, and our counseling shall not be in vain.

The present emergency has done much to teach the American people that all their institutions are interrelated. There has been some disposition in times past to think of schools as detached institutions. Leaders in commercial, industrial, and political life have seldom considered it to be important for them to spend time and energy in improving schools. School people have too often looked upon business and politics as subjects entirely outside the circle of their interests. The economic crisis has made us all aware in a new and vivid way that schools are a part of the general social order and that the curriculums of schools and their methods of dealing with pupils are largely determined by the conditions of life outside the schools.

Let us state in concrete terms the situation which now confronts this country. The industrial system has built cities. More than half the population of the United States has been crowded into limited spaces. These spaces are not adequate to provide children with the opportunities which nature intended they should have. A recent canvass of conditions in 257 representative cities revealed the fact that in the seven years from 1921 to 1928 the percentage of persons living in one-family houses decreased from 58.3 to 35.2. The narrow confines of an apartment, or even of a house, on a thickly populated street do not permit the children to play and work as they should if they are to develop normally. The city has erected schools as a part of its building program. Mark that not a word is said for the moment about what is provided in

the program of instruction. School buildings are absolutely essential factors in the solution of a city's housing problem. As mere devices to keep children off the streets, school buildings are necessary. There could be no cities if there were no schools to supplement the narrow living quarters occupied by the majority of the people of this country.

Are present-day schoolhouses too lavish in their equipment? The industrial system of the United States has erected great factories and warehouses. It has developed an elaborate system of highways. It has amassed great fortunes. This same industrial system has an obligation to erect for the young people schoolhouses which furnish ample light and air and space for study and play. Cities have taken something away from human beings, especially youthful human beings who are in process of developing. Cities must provide adequate substitutes for that which they have taken away. Without a school around the corner from every block of city apartments, the apartments would be intolerable. Let us be clear and explicit in our dealings with industrial leaders. Schools have a right to a substantial part of the earnings of industry.

Let us consider the situation from another point of view. Formerly, industry protected many children and housed them in its factories. The protection which it gave was, to be sure, sometimes a fraud, because it exploited children and profited by their cheap labor. As industrial processes became increasingly complicated, industry found it less and less profitable to keep children in factories. Of late years industry has not wanted children; it has shut its doors to them. Sometimes it has offered to the public the pretense that it is filled with the spirit of philanthropy. Many a law compelling children to attend school has been passed in the name of charity when it was in fact a law excluding children from industry.

Go, if you will, today with the youth who has completed the curriculum of an elementary or secondary school, or, for that matter, of a college, and see him in the market place or at the door of the shop offering his services. See him ask

for a place in the world of productive labor. You know how his application is received. More than five million young people were added to the school population of the United States during the decade from 1920 to 1930. Each decade from 1880 to the present, the population of our high schools has doubled. Since 1900 the population of institutions of higher education has increased fourfold—from 285,000 to more than 1,200,000. This social migration is not due to the caprice of youth. Great fundamental forces have been operating in American society. Those forces originated in an industrial system which has substituted machines for human hands and has become so complex and exacting that it no longer desires the labor of young people.

The veritable avalanche of human life which has descended on the schools has precipitated in these institutions a whole series of problems more momentous for the welfare of the country than are any of the problems which have come with the present economic crisis. This crisis is a symptom of a new social order. The schools have been struggling for a generation to prepare for this new order, while those who lead in the operations of our modern machine industry have given little or no heed to the change which has been impending for years. The schools have sought to adjust themselves to new conditions of life. They have exercised an ingenuity of invention far beyond that of industry itself.

How well we remember the arrogance with which business vaunted itself before October, 1929. How often we were exhorted to learn from business management how to conduct schools. The fact is that business was then and is today far less effective in rendering genuine service to the nation than are the schools.

I confess that I am filled with resentment when I hear the criticisms of those who say that the American schools are failures. There are the smug exploiters of society who have been driving communities to the brink of ruin by their greed and self-seeking. They have refused to adopt new taxing systems. They have refused to study social movements. They have been parsimonious with the schools, and they

have had the effrontery to pass adverse judgment on the experiments which the schools have been trying in the effort to prepare society for its new day. There are the exasperating critics who belong to our own fraternity, seekers after a little cheap notoriety, carping and complaining but doing nothing to clarify the situation. If the worst that our critics say were true, there would still be ample ground for pride in what has been achieved.

Very little imagination is required to frame an accurate picture of what has been happening. A short generation ago the upper grades of the elementary school and the whole high school were attended by limited numbers of pupils, all of whom were seeking the same kind of education. The majority of the young people of the country were leaving the schools before they reached the seventh grade and were taking their places in industry. The community found it comparatively easy to support schools because the attendance was small, especially at the upper levels. Then came the change, not primarily in the schools but primarily in the industrial and social systems. Great numbers of pupils of an entirely new type were sent to school. Teachers were called on to conduct classes made up of young people who had no slightest interest in the traditional subjects. Although the teachers had not been trained by society to give instruction in new subjects, they willingly tried as best they could to meet the situation forced upon them. Many teachers equipped to teach Latin or mathematics tried to organize courses in English and science and the arts. Society, be it repeated, made no adequate provision for the reception in the schools of the young people whom it crowded into those institutions. It was the teachers who met the situation, not the industrial system. The United States Office of Education is authority for the statement that the high schools of 1890 taught nine subjects whereas the high schools of today include in their programs as many as two hundred and fifty subjects. It is no wonder that some of the new courses are open to criticism. They are emergency measures intended to provide for young people who have been pushed out of industry. Even the elementary

grades have been obliged to change the content of their courses in the effort to keep pupils interested and alert. The institutions of higher education have expanded their curriculums to include commerce and forestry, agriculture and engineering, and other new lines of information and training wholly absent from their programs of instruction a generation ago.

Some of the additions to school programs of instruction have been made because new bodies of knowledge have accumulated in recent years. It should not be overlooked, however, that the impulse which stimulates man to seek new bodies of knowledge originates in modern civilization itself. Knowledge grows in response to the demands of life. Every development of modern life has compelled the curriculums of the schools to expand.

Of course, the introduction of new courses has been slow. Even today some schools are unable to offer suitable instruction to their pupils. I remember going some years ago, as a member of the staff of a state school survey, to visit a small rural high school. I climbed up a steep hillside and found some eighty or ninety pupils in a school building which had no equipment but fixed desks and bare walls. The rooms of this school were obviously intended for textbook courses of the traditional type. There were three teachers, including the principal, a young and inexperienced college graduate. The school was in a continuous uproar. I stayed until school was dismissed, or, perhaps I should say, until the session broke up for the day. I sat down with the principal and asked him what was the matter. He answered by saying that the pupils were not interested in their studies. "What are they interested in?" I asked. The answer was one of the most revealing I have ever heard. "What are they interested in?" he replied. "The bus ride." The bus ride took those children out of their squalid homes. It gave them companionship. It carried them along one of industry's new highways. It took them up the hillside and deposited them in a place where society unfortunately had made no adequate provision for their reception. Society sent them where there was none of

the thrill of the bus ride, where there were no contacts with the productive industries which they were eager to enter. They were not interested. Who was to blame? The three teachers, the traditional subjects of the curriculum, or the industrial and social systems, which sent to a school erected for one purpose young people who were absolutely unadjusted to that purpose?

Restless, uninterested pupils express emphatically, though not intelligently, the demand of society for a new program of instruction. A new program of instruction cannot be developed in a day or a year. It requires the highest intelligence to prepare new courses adapted to the demands of a new type of life. Not only so, but, when schools begin to experiment in the organization of new courses, it always happens that some members of the older generation charge the schools with being full of fads and frills. In the city in which I live there has been much criticism of the schools because an industrial high school for girls teaches millinery. A very good way to answer this criticism would, in my judgment, be for the city to require the persons who object to millinery to interest the girls in that industrial high school in a traditional subject of unquestioned respectability, such as Latin or trigonometry.

The schools stand between the generation which is passing out and has no adequate understanding of the new social order and the oncoming generation, which is eager to take its part in the world and unwilling to be bound by the fetters of a narrow program conceived and established in a day when machinery was new and cities were uncommon.

I have perhaps spent more time than I should in discussing the past. Our meeting today is far more concerned with the future than it is with society's failure to recognize its duty to young people. Our present task is one of consolidation and organization, of improvement and amplification, of education.

After all, there is a hopeful possibility of inspiring American society with enthusiasm for a new educational program. The individual parents of this country are eager to provide their children with opportunities which were denied to themselves.

The increase in school population is the aggregate result of many a domestic conference in which it was decided that the family must make a sacrifice in order that its younger members may be equipped as fully as possible for success in life. Even when the parents who send their children to school pass through the period of emotional disturbance which always attends the paying of taxes, they are eagerly desirous of securing advantages for their children. If we can keep the parent as taxpayer fully conscious of his duty as a parent, adequate support can be secured for the schools.

A striking exhibition of the fundamental American attitude toward education has been furnished during the past few months by the citizens of the state of North Carolina. That state, which recently passed a new school law, has witnessed some fifteen local referendums on school support. Each of these referendums was initiated for the purpose of reducing local taxes. Each referendum was made possible by a petition signed by 25 per cent of the voters of the district. The campaigns which preceded the referendums were so clear in the issues which they presented that every one of the referendums resulted in a vote favorable to the continuation of local taxes and the maintenance of the schools.

With the assurance which such examples supply, school administrators can well afford to attack with new courage and zeal the problems of the schools. We have not yet reached the highest levels to which we can attain. We have developed many new courses to meet the needs of modern life. We can now ask whether it is possible to make the present courses better and whether it is desirable to introduce into the curriculum new courses which will add essential elements to the program of instruction.

I believe that we can reorganize instruction in high schools and colleges so as to provide more compact and therefore more useful courses. I venture the rough estimate that the two hundred and fifty subjects now taught in the high schools of the United States can be reorganized into some ninety or a hundred substantial courses. At the college level the process of rearranging the contents of courses has made rapid progress

in recent years. Orientation courses, or general-survey courses, as they are sometimes called, have gathered up the scattered findings of specialists and are presenting to students the essentials of large fields of knowledge. The curriculum of the elementary school has been reorganized in such an efficient way that the lower grades cover adequately the rudimentary subjects. The upper grades are detaching themselves from the lower school and are taking on the pattern of the high school. All these changes are alike in that they are consolidating and systematizing the courses which were invented to meet the needs of present-day society. The reorganization thus hopefully begun calls for the best intelligence of our profession. Not only so, but it is our duty to show communities how important it is for the young people of the nation that time and energy be expended in this labor of reconstructing the curriculum.

Boards of education are in the habit of spending public money on teaching. They do not always understand that there is a function of the educational system quite as important as teaching, that is, the function of collecting materials to be taught and of arranging these materials so as to make them most valuable to pupils. If the world were static and if a subject of instruction once introduced into the school program could always be taught in exactly the same way generation after generation, school boards might possibly be justified in asking teachers to devote all their energies to mere routine teaching. We all know, however, that the world is not static and that the schools cannot be content to repeat the same materials year after year. Therefore, school boards must be persuaded to provide for constant and vigorous reorganization of materials of instruction. My recommendation, therefore, is that we enlist the cooperation of communities through their representatives on boards of education in a better organization of the school program. I have tried to lay the foundations for a campaign looking toward this better organization by pointing out that society is responsible for the present state of the schools and that society in general is obligated to cooperate with school people

in perfecting educational institutions and adjusting them to the needs of modern life.

If I could have my way, I would bring it to pass that the leading citizens of every community would come together and discuss education, not as a political or financial issue but as one of society's greatest undertakings. I do not believe that the community as a whole realizes its obligations to the schools. If we of the schools have been remiss in not seeing to it that the schools receive adequate public attention, let us resolve today that we will be more active in bringing together the leaders and informing them with regard to the experiments through which we are reorganizing the schools.

May I make a second recommendation. Man has been so busy compelling the material world to serve him that he has not taken time to understand the social institutions which he has invented. Especially is it true of our own nation that we have expended our energy in pioneering. We have swept across the continent and mastered its physical resources. Today we are discovering that the material resources which we have accumulated may be our destruction unless we learn what government is and what transportation and communication do to human beings. We do not know what money is and how it determines the progress or lack of progress of nations and of the world.

It would, of course, be foolish to hope that we can overcome our ignorance regarding social institutions and social forces in a day. It is even more foolish to omit from the program of our public schools the study of social institutions. We teach pupils in the elementary schools to compute taxes, but we do not tell them about taxes. We teach pupils in the high schools the history of ancient states and their problems, but we dare not discuss the urgent present-day problem of who shall own public utilities in the cities of the United States. We seem to be afraid that some local banker or member of the board of education, or the Federal Trade Commission will interfere if we discuss public utilities. The Federal Trade Commission has indeed in recent years practically banished the topic of public utilities from the high schools of the United

States. I do not have the honor of acquaintance with the gentlemen of this commission, but I am quite sure that the Federal Trade Commission is not so constituted that it can be trusted with the power to determine either positively or negatively what should be taught in the schools.

My recommendation is that we who are directly responsible for the schools be the first to recognize the obligation to introduce the young people of America to a fuller knowledge of social institutions than is now supplied by American education. If I had my way, I would bring it to pass that the center and core of the school curriculum at every level would be instruction regarding the social order. I would teach pupils, when they use number, that they are enjoying the advantages of one of the greatest intellectual inventions that the race has ever perfected. When they study science, I would have them learn that knowledge is the product of long cooperative labor. When they study literature, I would have them realize that they are being initiated into the ideals of the civilization of which they are a part.

It is no simple task to transform the curriculums of the schools into instruments for the spread of social mindedness. I have referred to experiments in other lands. Communism has laid its hand on youth and has shown its determination to dominate society by compelling thinking to follow prescribed lines. Dictatorship has organized youth to perpetuate its undemocratic rule. It is our opportunity and our duty to evolve a plan of education that will provide every individual with that broad training which leads to freedom of the type guided by insight and understanding. If the freedom which our form of society boasts as its greatest virtue is to be conserved and fostered, our people must depend not on a political doctrine inculcated by drastic compulsion but on enlightenment.

I have argued with such vigor as I can command for a consolidation of the school program and for the introduction of a new core into the curriculums of all schools. What I have advocated cannot be accomplished by any single school system or by any loosely integrated organization. This

Department meets year after year, bringing together agencies which have great potential influence. After our meeting we scatter, and as single administrators we are comparatively ineffective in reconstructing the curriculum or improving the attitude of the public toward schools.

Representatives of the natural sciences were able during the War to organize a foundation which has been powerful in promoting the cultivation of all the studies that have to do with material things. The schools of this country need an educational foundation which shall be the center of cooperative studies and of cooperative action. This foundation, if it is to be effective, will require resources at least as large as those now devoted to the promotion of the natural sciences. Should not this Department be energetic, together with other educational organizations, in bringing into being an educational foundation the functions of which will be the study of the internal problems of the schools and the development of a clear understanding of the relation of the schools to industry, business, and politics? What the educational system of this country needs is organized and informed leadership.

It is futile to wait for the government to move if the representatives of educational administration exhibit no power of concerted action. It is futile to duplicate efforts at scattered points. The wisdom of educational leaders must be focused, and their influence must be strengthened through cooperation.

If we say to pupils that the cultivation of intelligence is their highest privilege and duty, is it not doubly our obligation to organize for the purpose of bringing the highest intelligence to bear on our tasks?

In every part of this nation individual school administrators are struggling to meet as best they can an emergency which threatens the institutions we serve. There is an abundant lack of guiding principles. There is a very general lack of understanding on the part of the people of the United States of the unique character of their educational system. We have come to a time of stress ill prepared to meet its

demands. The emergency has revealed to us weaknesses which we must correct.

Only through concerted action can we effectively carry out the injunction of our great leader:

"Promote, then, as an object of primary importance, institutions for the general diffusion of knowledge. In proportion as the structure of a government gives force to public opinion, it is essential that public opinion should be enlightened."

CHARLES H. JUDD,
The University of Chicago.

Standardization and Achievement[1]

THIS Association, the second of its kind, was formed in 1895, since which time the Association has grown not only as to territory involved and schools concerned, but it has come to have great power and influence in the whole field of secondary and collegiate education throughout the land.

From the beginning this Association attracted the attention and the interest of the leaders in the field of education. The published proceedings of the early days report the addresses made by the great men of education of that day, and include such names as Angell, Draper, Butler, Harper, Jesse, Jordan, MacLean, Bryan, Russell, Paul Shorey, Nightingale, Harris, Charles Kendall Adams, and others. This meeting afforded a forum for the discussion of such great topics as "What Constitutes a College and What a Secondary School." It is difficult to over-estimate the influence on this Association of a paper read by President Jesse on that very subject in 1896. John Dewey read a paper urging the breaking down of so-called barriers between higher education and primary education.

A casual reading of those early addresses suggests that most of the topics that we are now worrying about were discussed with clearness and conviction in that early day. No one of today has voiced more clearly the danger of standardizing agencies forcing as undue economic burden on taxpayers in a period of economic distress than did President Angell of Michigan in the beginning of the activity of the Association.

The inimitable Paul Shorey said:

"I envy the perennial youthfulness of heart of those who come up to the discussions of large educational problems year after year with unabated zeal. I recognize the necessity of

[1] Address before the North Central Association of College and Secondary Schools, Chicago, March 18, 1932.

work. Though we can not hope to mould opinion or shape practice into perfect accordance with our own best insight and judgment, every judicious and well-weighed utterance does something perhaps to stem the rising flood of inherent gabble that threatens to submerge us all. And so, recognizing how little we can achieve, we must nevertheless devote ourselves to the accomplishment of that little."

Even as today, the men in that far-off day were impressed by the fact that they were living in a new age. Even earlier Barnas Sears said:

"We are living in a new age; an age of new scenes and new arts, of thronged cities, of universal locomotion and communication, of swarming literary productions, of new ideas, of a humanitarian civilization, and preeminently of enthusiasm for education. We are here today to take from this proud eminence a retrospect of the schools of our common country for the last fifty years. It will not be amiss, at the outset, to glance for a moment at the schools of former times."

It was about this time that James McCosh said:

"What are we to do with all of these colleges? There are four hundred of them. Someone has proposed to burn about half the male colleges in order to benefit the other half."

They were likewise amazed at the great expansion of the secondary schools. Illinois registered 29,000 high school pupils, 3,500 graduates, and owned $4,500,000 worth of high school buildings. The state of Minnesota had 10,000 students, 1,000 graduates, and over $2,000,000 invested in buildings.

Michigan had taken the lead in accepting students from certain high schools on certificate. There was widespread recognition of the desirability of erecting and maintaining the educational ladder wherein it would be possible for a child to start at the bottom and go to the top. The need for this unification had just been recognized by the National Education Association in a report prepared by the Committee of Ten which William T. Harris has said was the most important educational document ever prepared in this country up to that time. Thus, in the spirit of the time, these various asso-

ciations were formed for the purpose of establishing a clearer relationship between the schools of secondary and collegiate level.

It is a noteworthy fact that during the early years of this Association the members were content to read serious papers and to have sharp and witty discussions relative to the various educational practices in improving the secondary schools and colleges.

Not until 1903 did this Association seriously face the question of setting up definite standards to become operative throughout the territory. This was done notwithstanding the hesitation of many leading educators, including President Draper of Illinois, President Bryan of the University of Indiana, President Angell of the University of Michigan, and President Jordan of Leland Stanford. President Jordan, in his address before this Association, was most bitter in his criticism of standardization. He said:

"The most hopeful thing in the present situation is the condition of absolute chaos into which we are drifting, because it means the individualization of teachers and the opportunity for students to get whatever they want in some place or other—making the individual more important than the system is."

These fears seem prophetic in the light of the address made by Doctor Judd in 1928 in which he said:

"I shall have to content myself with a mere reference to the fact that some of the ablest friends of education are beginning to call in question the standardizing activities of such agencies as the regional associations of which we are one. These critics of standardization are asking whether we are not stifling our legitimate experimentations by our efforts to compel institutions to meet standards."

Criticism had been previously expressed in vigorous terms by President Eliot of Harvard and President Wilbur of Stanford. Superintendent Prunty of Tulsa and President Capen of Buffalo expressed before this meeting last year similar views, and within the month Doctor Hutchins, of Chicago, has expressed himself with equal concern. Thus it is apparent that the elaborate schemes of standardization

which have been expressed more fully by this Association than by any other agency in America, are now being challenged.

Few of us realize the rapid growth in power which has been exercised by this organization. Our current budget is in sharp contrast to that of the early years. The first commission for the study of English included five members with an expense account of $50, which had been raised from $25! Since that modest beginning, we have witnessed the development of standards that have affected almost every conceivable phase of school work. We have standardized school years, school months, school weeks, school days, school hours and school minutes in terms of units, credits, points, majors. At the rate we have been going in recent years, we will soon interpret education in terms of split seconds.

We have set up standards of study for all phases of subject matter, including the classics and English and Physics and Chemistry, Music and Dramatics. We have set up standards for textbooks, for supplementary material, including fiction to be read and songs to be sung. We have set up a program of procedure ranging from the teaching load and clock hours to library and laboratory equipment. We have sought to standardize the preparation of teachers, ranging from the number of years of college attendance to the subject matters studied. We have challenged the length of the course, the number of hours, and the title given in the catalog.

The recent experimental studies and other scientific data suggest that the standards that have been set up for size of class, either in high schools or in colleges, seem to be ill adapted to all classes. The latest University of Chicago plan proposes to limit the size of certain classes to the size of auditorium and the carrying power of the professor's voice.

In the last twenty years literally thousands of classrooms have been built in this territory in such a way as to make it well nigh impossible to take full advantage of the present implication of the scientific inquiry relative to the size of classes. The North Central standards have been dominant in the erection of practically all of the laboratories in the high

schools of this area. Last year Professor Downing, of the University of Chicago, succeeded in getting permission from this Association to prepare students for college with a sharp reduction in laboratory material. The Stephens College experiment has gone far enough to convince most of us of the fact that there is no special merit in the North Central standard of eight departments in an accredited college.

Doctor Capen told us last year that we had substituted engineering standards for educational standards and that we had become "more interested in the package than in the contents."

Despite the elaborate detail with which we have sought to enforce standards, with the various schemes of inspections and records and checks and counterchecks, warnings and dismissals, the actual product varies so widely as to give full point to Capen's illustration of the package and the contents. In recent years the University of Iowa has been holding state-wide academic examinations. Competitive examinations in fourteen high school subjects have been given in the various districts throughout the entire state. This so-called every pupil contest is participated in by nearly four hundred high schools enrolling more than 60,000 students. Analyses of the results by Doctor Lindquist show the variability in composite school averages in any one subject for all of the schools is as great as the variability of individual achievement in a typical school; that is, the difference in average achievement between the best and the poorest school in a subject such as English or mathematics or for all subjects combined, is as great as the difference between the best and the poorest student in the typical school. This variability is found even when the supposedly best schools alone are considered. Thus, many schools that have the same external standards of selection of teachers, teaching load, building and other conditions to meet the North Central Association list, rank actually lower than other schools which are not accredited. Indeed, an array of 92 North Central high schools and 283 non-accredited high schools distributed for average composite student scores revealed almost complete overlapping;

that is to say, 97 per cent of the non-accredited schools show average composite scores in the same range as 98 per cent of the North Central schools.

Fourteen per cent of the non-accredited schools had an average score which exceeded the average of all accredited schools. Again, each school in the upper one-third of the non-accredited list was superior to each school in the lower one-third of the accredited schools.

Further analyses of these data were especially interesting in view of the fact that in each subject an attempt was made to establish the relationship between certain verifiable facts, such as teaching experience, training, and teaching load, of the teacher, and the average test performance of her pupils. The facts given for American history are typical of those secured in each of the other thirteen subjects.

Student test averages of teachers of no experience, that is, teachers who in 1931 were teaching American History for the first time, were compared with those of teachers of seven or more years of experience. The surprising fact that came to the surface was that these two distributions overlapped almost completely. The range of averages for the upper 96 per cent of inexperienced teachers coincided with the range of averages for the lower 92 per cent of teachers with seven years or more of experience.

A comparison was made of teachers in American history who had majored in history and those who had neither majored nor minored in the subject in their college training. The distribution of test averages for the first of these groups almost exactly coincided with the distribution for the second group. The performance of students of teachers who had majored in American history was also compared with that of students of teachers who had had no college training in American history. It was found that the performance of the students in history of 34 teachers who had had no college work in this subject overlapped completely with that of students of teachers who had majored in American history. This does not mean that these teachers were ignorant of American history; it does mean that our current standards

make no provision for recognition of knowledge attained outside of the college classroom.

It will at once be asked whether or not there are any direct correlations between the performance of these students and the conditions under which they were taught. The best answer we can make is that competent students seem to come from schools of high morale and similar subjective conditions. Student performance in this competition suggests little relation to such external objective standards as are customarily employed by standardizing agencies.

Not only did the average performance of students vary widely in schools in the same general classification, but to our surprise, we found that the freshman physics work in the University was ill adapted to the sequential needs of the best high school students in physics. For example, seventy superior pupils in high school physics selected for superior test performance were given a carefully constructed objective examination which had been used for several years as a final examination in freshman physics at the State University of Iowa. Only two of these superior high school pupils failed to meet the minimum standard set for college students; a sigificant number exceeded the college "B" standard, despite the fact that we have felt heretofore we had a satisfactory relationship between the high school and the freshman course in the University.

We ourselves have hardly realized the powerful implications of the current standards. This past quarter of a century has been a period of expansion. Schools have been growing, wealth has been increasing, and since these standards for the most part sounded reasonable, they were seized upon and adopted for the purpose of improving school buildings, increasing the size of staff, multiplying equipment, improving the preferential opportunities for favored subjects in high schools and colleges, so that there was relatively little challenge. In the meantime, there has been a growing disposition on the part of the professional educationist to subject isolated standards to scientific inquiry, and it must be admitted that more than one of our standards that seemed to be satis-

factory from the standpoint of opinion have not been able to withstand scientific experiment. Size of classes and the use of laboratory material are cases in point. Now comes the statewide contest in Iowa which certainly casts doubt upon the effectiveness of the whole system as a basis for selecting the best high schools. The fundamental theory back of the organization and the development of the North Central Association as a standardizing agency was that by applying the yard stick of its standards, the best high schools could be selected. In Iowa it is a fact that, measured by test of students in fourteen subjects, the variation between these high schools is as great as or greater than high schools not on the list.

It is apparent on all sides that one of the outcomes of the present period of depression is the challenge of the excellence of the things we are doing. It is fortunate indeed that there are signs in this Association of lack of full confidence in current standards. It is most encouraging to note that certain institutions, notably Chicago, have had more or less continuous plans for betterment. Chicago is sufficiently powerful from the standpoint of wealth, prestige and personnel of staff to be able to undertake almost any kind of an experiment, but I believe we should seriously consider the fact that there is much evidence to indicate that we should not only *permit* but *encourage* all schools, secondary and collegiate, normal and junior college, large and small, to study their own problems with a view towards ascertaining the effect upon students of modified procedure irrespective of our so-called engineering standards.

Doctor Suzzallo has recently told us:

"Schooling should be the emphasis on learning rather than on teaching. Schooling will become more self-education under teacher stimulation and assistance. In fact, the teacher under the new regime will become a supervisor of learners. What a revolution would result from this changed attitude and point of view!"

Hail the day when this Association becomes so permeated with the spirit of doubt as to current procedure that it will

recognize more fully the educational knowledge which we now have of the conditions under which students learn, to the end that the next quarter of a century shall mark a period of widespread experimentation based on a growing knowledge of the outcome of educational procedure—so that the citizenry in this area may be given a program of education wherein students find a genuine challenge to learning that will continue from secondary and higher fields to adult education. The world is calling for improved education. Let the shackles of conventional and arbitrary standards be loosened in order to free the spirit of actual accomplishment on higher levels!

WALTER A. JESSUP,
The University of Iowa.

The 1931 Psychological Examination

THERE have been eight successive annual editions of the American Council on Education Psychological Examination. Several different forms of psychological examinations have been tried out, and the most diagnostic have been retained to make up the present form of the examination. Another consideration in determining the number of tests has been the demand of the colleges for an examination which would not require so long a time to give as some examinations take. There are still frequent requests for a somewhat shorter test, but at present we do not feel that the examination can be shortened without decreasing its value. The examination consists of five separate tests, and the scores in the separate parts are so weighted that they can be combined into a gross score for the whole examination.

The number of schools that have ordered the 1931 edition is 377, and a total of 165,341 examinations have been sent out. (These figures are those of March first.)

This report contains norms on the scores of 41,369 students in 152 colleges. Tabulations have been made of all scores reported by March seventh. The list of colleges on whose scores the norms are based is given below. The number of records received from each and the median gross score for each are also given.

Following the list of colleges are frequency distributions and tables of norms for each of the five separate tests and for gross scores. Each table contains three frequency distributions and three sets of percentile ranks; one for the total number of cases reported, one for men, and one for women.

On the last table are shown the percentile ranks for corresponding gross scores in four successive editions.[1] The equivalence of these examinations is discussed later in the report.

[1] Equivalent scores for the 1926, 1927, and 1928 editions were given in THE EDUCATIONAL RECORD for April, 1929, (X, No. 2, pp. 105–115).

UNIVERSITIES AND COLLEGES SUBMITTING TEST RECORDS

	No. of students	*Median gross score*
University of Akron, Akron, Ohio	332	155.42
Alabama College, Montevallo, Ala.	247	101.09
Allegheny College, Meadville, Pa.	193	164.58
Arizona State Teachers College, Tempe, Ariz.	310	113.75
University of Arizona, Tucson, Ariz.	418	158.13
Baker University, Baldwin, Kans.	96	135.00
Bates College, Lewiston, Me.	211	176.25
Baylor University, Waco, Tex.	284	125.38
Belhaven College, Jackson, Miss.	55	121.25
Birmingham-Southern College, Birmingham, Ala.	296	121.30
Bowdoin College, Brunswick, Me.	153	196.54
Bradley Polytechnic Institute, Peoria, Ill.	265	138.33
Brenau College, Gainesville, Ga.	186	126.00
Brigham Young University, Provo, Utah.	404	99.58
Bucknell University, Lewisburg, Pa.	283	165.48
University of Buffalo, Buffalo, N. Y.	352	171.60
California Polytechnic School, San Luis Obispo, Cal.	85	142.50
Carleton College, Northfield, Minn.	283	160.25
Centenary College, Shreveport, La.	222	107.33
Centre College, Danville, Ky.	129	128.75
University of Chattanooga, Chattanooga, Tenn.	176	146.25
University of Chicago, Chicago, Ill.	687	202.21
Chico State Teachers College, Chico, Cal.	270	131.18
Clark University, Worcester, Mass.	56	192.22
Coe College, Cedar Rapids, Iowa	248	125.38
Colby College, Waterville, Me.	185	165.48
Colgate University, Hamilton, N. Y.	289	171.25
University of Colorado, Boulder, Colo.	806	145.38
Connecticut College, New London, Conn.	191	183.42
Junior College of Connecticut, Bridgeport, Conn.	73	164.17
Converse College, Spartanburg, S. C.	78	141.43
Creston Junior College, Creston, Iowa.	53	118.33
Culver-Stockton College, Canton, Mo.	92	126.67
Dartmouth College, Hanover, N. H.	688	206.67
University of Delaware, Newark, Del.	247	154.64
DePauw University, Greencastle, Ind.	546	164.67

	No. of students	*Median gross score*
Summer School of Duke University, Durham, N. C.	787	150.52
Earlham College, Richmond, Ind.	166	129.00
Emory University, Emory University, Ga.	188	143.33
College of Emporia, Emporia, Kans.	95	126.25
Eureka College, Eureka, Ill.	78	141.25
Evansville College, Evansville, Ind.	157	133.18
Florida State College for Women, Tallahassee, Fla.	601	131.92
University of Florida, Gainesville, Fla.	785	134.91
Fresno State Teachers College, Fresno, Cal.	596	127.07
Georgia State College for Women, Milledgeville, Ga.	148	121.82
Georgian Court College, Lakewood, N. J.	42	137.50
Gettysburg College, Gettysburg, Pa.	187	133.57
Goshen College, Goshen, Ind.	45	168.33
Goucher College, Baltimore, Md.	225	199.00
Graceland College, Lamoni, Iowa	90	132.22
Hanover College, Hanover, Ind.	152	116.00
Haverford College, Haverford, Pa.	83	241.67
Highland Park Junior College, Highland Park, Mich.	122	146.67
Hobart and William Smith Colleges, Geneva, N. Y.	129	177.50
Howard University, Washington, D. C.	158	102.00
Huron College, Huron, S. D.	84	135.00
Illinois College, Jacksonville, Ill.	113	152.50
University of Illinois, Urbana, Ill.	2168	146.39
Immaculata College, Immaculata, Pa.	90	169.00
Iowa Wesleyan College, Mt. Pleasant, Ia.	100	109.00
Jamestown, College, Jamestown, N. D.	103	162.08
Jefferson University, Dallas, Tex.	13	127.50
Juniata College, Huntingdon, Pa.	167	122.27
Kalamazoo College, Kalamazoo, Mich.	109	164.50
Kansas State Teachers College, Pittsburg, Kans.	376	100.61
Kenyon College, Gambier, Ohio	83	195.00
Loretto Heights College, Loretto Heights, Colo.	27	155.00
University of Louisville, Louisville, Ky.	319	133.61
Second Semester	66	145.00
Lyons Township Junior College, La Grange, Ill.	136	168.00

	No. of students	*Median gross score*
Marion Military Institute, Marion, Ala...	62	159.00
Marshall College, Huntington, W. Va.....	596	110.44
Maryland State Normal School, Frostburg, Md.....	43	93.13
Maryland State Normal School, Towson, Md.....	362	134.05
University of Maryland, College Park, Md.	497	147.42
Maryville College, Maryville, Tenn.....	290	132.27
Marywood College, Scranton, Pa.....	91	131.88
Massachusetts State College, Amherst, Mass.....	304	190.40
Michigan State Normal College, Ypsilanti, Mich.....	647	128.27
University of Michigan, Ann Arbor, Mich.	1296	171.72
Missionary Baptist College, Sheridan, Ark.	22	79.00
Mississippi Delta State Teachers College, Cleveland, Miss.....	124	115.71
University of Missouri, Columbia, Mo....	813	130.07
Missouri Valley College, Marshall, Mo....	99	129.29
Montana State College, Bozeman, Mont..	310	142.61
State University of Montana, Missoula, Mont.....	480	135.00
J. Sterling Morton High School, Cicero, Ill.	360	149.60
Mount St. Charles College, Helena, Mont.	46	142.50
Mount St. Joseph College, Chestnut Hill, Pa.....	78	159.00
College of Mount St. Vincent, New York, N. Y.....	121	173.13
Muhlenberg College, Allentown, Pa.....	149	162.50
University of Nebraska, Lincoln, Neb.....	330	143.33
University of Nevada, Reno, Nev.....	230	133.85
University of New Hampshire, Durham, N. H.....	483	151.91
University of New Mexico, Albuquerque, N. M.....	291	120.28
Northwestern University, Evanston, Ill...	945	189.59
University of North Carolina, Chapel Hill, N. C.....	735	128.98
Oakwood School, Poughkeepsie, N. Y.....	21	172.50
Oregon State Agricultural College, Corvallis, Ore.....	1025	143.15
Universtiy of Oregon, Eugene, Ore.....	701	143.43
Pacific University, Forest Grove, Ore.....	109	133.57

	No. of students	*Median gross score*
Park College, Parkville, Mo.	183	145.00
Parsons College, Fairfield, Iowa	89	170.83
Phillips University, Enid, Okla.	121	126.82
Pomono College, Claremont, Calif.	185	193.00
College of Puget Sound, Tacoma, Wash.	245	134.60
Reed College, Portland, Ore.	162	195.33
Rollins College, Winter Park, Fla.	160	169.00
Rosemont College, Rosemont, Pa.	55	155.83
College of St. Elizabeth, Convent Station, N. J.	110	160.83
St. Mary College, Leavenworth, Kans.	42	139.00
St. Mary's College, Notre Dame, Ind.	107	150.71
St. Mary's University, San Antonio, Tex.	74	125.00
St. Mary-of-the-Woods College, St. Mary-of-the-Woods, Ind.	99	146.50
St. Vincent College, Latrobe, Pa.	62	131.43
St. Xavier College, Chicago, Ill.	51	178.75
Santa Barbara State Teachers College, Santa Barbara, Cal.	217	132.92
Seton Hill College, Greensburg, Pa.	49	155.00
Simpson College, Indianola, Iowa	186	112.35
Southern Methodist University, Dallas, Tex.	441	152.88
Southwestern College, Winfield, Kans.	152	132.14
State Agricultural and Mechanical College, Jonesboro, Ark.	132	115.71
Sweet Briar College, Sweet Briar, Va.	220	186.54
Syracuse University, Syracuse, N. Y.	1308	161.79
Temple University, Philadelphia, Pa.	858	154.35
Texas State College for Women, Denton, Tex.	442	122.57
Thiel College, Greenville, Pa.	87	146.43
Trinity College, Hartford, Conn.	134	186.43
Trinity College, Washington, D. C.	91	190.56
University of Tulsa, Tulsa, Okla.	220	138.24
Tusculum College, Greeneville, Tenn.	115	103.50
Valparaiso University, Valparaiso, Ind.	197	143.18
Vanderbilt University, Nashville, Tenn.	216	164.17
University of Vermont, Burlington, Vt.	363	148.28
Virginia Polytechnic Institute, Blacksburg, Va.	425	119.11
Washburn College, Topeka, Kans.	226	141.67
Washington College, Chestertown, Md.	94	134.00

	No. of students	*Median gross score*
State College of Washington, Pullman, Wash.	1009	131.29
Washington and Jefferson College, Washington, Pa.	122	139.00
Washington and Lee University, Lexington, Va.	262	154.74
Webster College, Webster Groves, Mo.	46	159.00
Wells College, Aurora, N. Y.	79	213.89
West Virginia University, Morgantown, W. Va.	304	126.67
Western Maryland College, Westminster, Md.	159	132.50
Westminster College, New Wilmington, Pa.	226	143.81
Wheaton College, Wheaton, Ill.	213	166.94
Willamette University, Salem, Ore.	194	145.00
William Woods College, Fulton, Mo.	213	134.69
Wilson College, Chambersburg, Pa.	149	192.19
Winona State Teachers College, Winona, Minn.	240	123.33
Yankton College, Yankton, S. D.	111	123.57
Central Y.M.C.A. College, Chicago, Ill.	307	146.05

Completion Test

Norms based on the scores of 33,138 students in 129 colleges. 18,330 men; 13,757 women.

Score equals two times the number of right answers.

Perfect score equals 80.

Score	*Men*		*Women*		*Total*[1]	
	Frequency	*Percentile*	*Frequency*	*Percentile*	*Frequency*	*Percentile*
0	35	.001	22	.001	61	.001
2	60	.004	64	.004	133	.004
4	119	.008	126	.010	263	.010
6	215	.018	207	.022	452	.020
8	347	.032	307	.042	689	.038
10	415	.054	363	.066	826	.060
12	581	.081	503	.098	1137	.090
14	621	.114	582	.137	1257	.126
16	724	.150	646	.182	1414	.166
18	881	.194	717	.231	1663	.213
20	950	.244	727	.284	1737	.264
22	975	.296	823	.340	1848	.318
24	1020	.351	791	.398	1872	.374
26	1072	.408	763	.455	1884	.432
28	1097	.467	798	.512	1950	.490
30	993	.524	779	.569	1814	.546
32	1022	.579	780	.626	1848	.601
34	935	.632	726	.680	1699	.654
36	898	.682	661	.731	1605	.704
38	814	.729	579	.776	1438	.750
40	739	.772	506	.816	1276	.792
42	700	.811	433	.850	1169	.828
44	578	.846	384	.879	991	.861
46	493	.874	333	.905	844	.888
48	443	.900	301	.928	763	.912
50	366	.923	226	.948	604	.933
52	306	.941	159	.962	480	.950
54	244	.956	137	.972	386	.963
56	207	.968	99	.980	320	.974
58	144	.978	77	.987	229	.982
60	113	.985	49	.992	168	.988
62	81	.990	38	.995	121	.992
64	49	.994	16	.996	68	.995
66	37	.996	15	.998	52	.997
68	23	.998	7	.998	31	.998
70	18	.998	3	.999	21	.999

[1] The total includes the scores of 1,051 students not classified according to sex.

72	11	.999	3	.999	14	.999
74	4	.999	4	.999	8	.999
76			3	.999	3	.999
Lower Quartile	20.23		18.72		19.45	
Median	29.16		27.58		28.36	
Upper Quartile	38.98		36.84		38.00	

Artificial Language Test

Norms based on the scores of 33,198 students in 129 colleges. 18,366 men; 13,778 women.

Score equals the number of words correctly translated. Perfect score equals 73.

	Men		*Women*		*Total*[1]	
Score	*Frequency*	*Percentile*	*Frequency*	*Percentile*	*Frequency*	*Percentile*
0– 2	191	.005	71	.002	273	.004
3– 5	165	.014	75	.008	247	.012
6– 8	375	.030	106	.014	499	.024
9–11	550	.055	120	.022	707	.042
12–14	1054	.098	274	.037	1374	.072
15–17	1371	.164	422	.062	1865	.122
18–20	1527	.244	565	.098	2166	.182
21–23	2049	.340	995	.155	3146	.262
24–26	1866	.447	1092	.230	3047	.356
27–29	1596	.542	986	.306	2679	.442
30–32	1244	.619	910	.375	2235	.516
33–35	1066	.682	879	.440	2010	.580
36–38	909	.736	787	.500	1762	.636
39–41	840	.783	854	.559	1741	.689
42–44	744	.826	777	.618	1566	.739
45–47	524	.860	707	.672	1280	.782
48–50	567	.890	845	.729	1441	.823
51–53	471	.919	827	.790	1331	.865
54–56	464	.944	825	.850	1313	.904
57–59	256	.964	434	.895	705	.934
60–62	159	.975	283	.921	453	.952
63–65	102	.982	252	.940	367	.964
66–68	99	.988	206	.958	313	.975
69–71	104	.993	264	.974	381	.986
72–73	73	.998	222	.992	297	.996
Lower Quartile	19.73		26.24		22.10	
Median	27.07		37.53		30.81	
Upper Quartile	38.39		50.52		44.19	

[1] The total includes the scores of 1,054 students not classified according to sex.

Analogies Test

Norms based on the scores of 33,121 students in 129 colleges. 18,320 men; 13,750 women.

Score equals two times the number of right answers.

Perfect score equals 56.

Score	*Men*		*Women*		*Total*[1]	
	Frequency	*Percentile*	*Frequency*	*Percentile*	*Frequency*	*Percentile*
0	213	.006	101	.004	331	.050
2	192	.017	101	.011	305	.014
4	261	.029	210	.022	493	.026
6	407	.048	308	.041	747	.046
8	528	.073	392	.066	956	.072
10	640	.104	448	.097	1124	.102
12	633	.140	520	.132	1210	.138
14	628	.174	522	.170	1191	.174
16	649	.209	484	.206	1184	.210
18	630	.244	518	.243	1205	.246
20	690	.280	544	.282	1281	.284
22	758	.320	571	.322	1393	.324
24	833	.362	628	.366	1500	.368
26	880	.410	702	.414	1637	.415
28	1015	.462	824	.470	1890	.468
30	1097	.519	829	.530	1986	.527
32	1120	.580	844	.591	2023	.588
34	1135	.641	919	.655	2106	.650
36	1139	.703	826	.718	2023	.712
38	1058	.763	858	.780	1967	.772
40	931	.818	726	.838	1706	.828
42	849	.866	630	.886	1515	.876
44	676	.908	456	.926	1162	.916
46	513	.940	337	.955	866	.947
48	397	.965	236	.976	646	.970
50	247	.982	112	.988	362	.986
52	136	.992	74	.995	215	.994
54	55	.998	25	.999	82	.998
56	10	.999	5	.999	15	.999
Lower Quartile	18.33		18.36		18.21	
Median	29.33		29.00		29.08	
Upper Quartile	37.57		37.03		37.27	

[1] The total includes the scores of 1,051 students not classified according to sex.

Arithmetic Test

Norms based on the scores of 33,063 students in 129 colleges 18,288 men; 13,720 women.

Score equals four times the number of right answers.

Perfect score equals 80.

Score	*Men*		*Women*		*Total*[1]	
	Frequency	*Percentile*	*Frequency*	*Percentile*	*Frequency*	*Percentile*
0	188	.050	563	.020	770	.012
4	596	.026	1321	.089	1977	.053
8	1112	.074	1883	.206	3089	.130
12	1658	.149	2054	.350	3854	.234
16	1885	.246	1883	.493	3928	.352
20	2080	.354	1730	.625	3956	.472
24	2065	.468	1317	.736	3484	.584
28	1843	.574	963	.819	2895	.680
32	1578	.668	668	.878	2309	.759
36	1313	.747	474	.920	1834	.822
40	1054	.812	320	.948	1414	.872
44	853	.864	209	.968	1092	.910
48	623	.904	135	.980	787	.938
52	468	.934	104	.989	587	.958
56	339	.956	48	.994	390	.973
60	256	.972	22	.997	285	.984
64	164	.984	12	.998	183	.990
68	106	.991	6	.999	112	.994
72	65	.996	4	.999	70	.998
76	33	.999	4	.999	37	.999
80	9	.999			10	.999
Lower Quartile	16.15		9.22		12.54	
Median	25.21		16.21		21.00	
Upper Quartile	36.18		24.67		31.54	

[1] The total includes the scores of 1,055 students not classified according to sex.

Opposites Test

Norms based on the scores of 32,905 students in 129 colleges. 18,206 men; 13,646 women.

Score equals three times the number of right answers.

Perfect score equals 81.

	Men		*Women*		*Total*[1]	
Score	*Frequency*	*Percentile*	*Frequency*	*Percentile*	*Frequency*	*Percentile*
0	613	.017	260	.010	898	.014
3	401	.045	246	.028	676	.038
6	651	.074	359	.050	1044	.064
9	773	.112	486	.081	1313	.100
12	843	.157	632	.122	1534	.142
15	879	.204	684	.170	1624	.190
18	877	.252	680	.220	1622	.240
21	896	.302	697	.270	1659	.290
24	908	.351	707	.322	1674	.340
27	821	.398	689	.374	1555	.390
30	961	.448	686	.424	1701	.439
33	864	.498	708	.475	1628	.490
36	885	.546	676	.526	1609	.538
39	905	.594	675	.575	1632	.588
42	917	.644	595	.622	1559	.636
45	861	.694	599	.665	1500	.683
48	803	.739	589	.708	1444	.728
51	756	.782	569	.751	1351	.770
54	669	.821	559	.792	1251	.810
57	604	.856	476	.830	1109	.846
60	566	.888	440	.864	1043	.878
63	501	.918	448	.896	978	.909
66	424	.942	373	.926	816	.936
69	350	.964	334	.952	699	.960
72	258	.981	246	.974	518	.978
75	129	.992	150	.988	287	.990
78	75	.997	65	.996	147	.996
81	16	.999	18	.999	34	.999
Lower Quartile	17.88		19.80		18.60	
Median	33.12		34.47		33.62	
Upper Quartile	48.77		50.93		49.57	

[1] The total includes the scores of 1,053 students not classified according to sex.

Gross Score

Norms based on the scores of 41,369 students in 152 colleges. 18,370 men; 13,784 women.

Perfect score equals 370.

Score	Men		Women		Total [1]	
	Frequency	*Percentile*	*Frequency*	*Percentile*	*Frequency*	*Percentile*
0– 9	4	.000	1	.000	6	.000
10– 19	9	.000	11	.000	26	.000
20– 29	56	.002	33	.002	108	.002
30– 39	125	.007	77	.006	252	.006
40– 49	241	.017	149	.014	473	.015
50– 59	426	.035	276	.030	852	.031
60– 69	581	.063	412	.055	1213	.056
70– 79	749	.099	589	.091	1686	.091
80– 89	849	.142	615	.135	1823	.134
90– 99	982	.192	724	.183	2115	.181
100–109	1117	.249	840	.240	2429	.236
110–119	1100	.310	847	.301	2458	.295
120–129	1170	.371	894	.364	2648	.357
130–139	1207	.436	903	.429	2664	.421
140–149	1109	.499	916	.495	2623	.485
150–159	1104	.559	857	.560	2590	.548
160–169	1120	.620	901	.624	2557	.610
170–179	1001	.678	740	.683	2285	.669
180–189	975	.732	781	.738	2278	.724
190–199	874	.782	637	.790	1992	.776
200–209	772	.827	588	.834	1779	.821
210–219	640	.865	507	.874	1561	.861
220–229	516	.897	451	.909	1293	.896
230–239	440	.923	324	.937	1019	.924
240–249	348	.944	229	.957	799	.946
250–259	280	.961	168	.971	598	.963
260–269	190	.974	121	.982	436	.975
270–279	138	.983	85	.989	301	.984
280–289	114	.990	58	.994	234	.991
290–299	70	.995	25	.997	137	.995
300–309	26	.997	15	.999	63	.998
310–319	27	.999	5	.999	45	.999
320–329	7	.999	4	.999	19	.999
330–339	2	.999	0	.999	3	.999
340–349	1	.999	1	.999	3	.999
350–359					1	.999
Lower Quartile	105.12		106.66		107.36	
Median	145.13		145.68		147.37	
Upper Quartile	188.49		187.08		189.75	

[1] The total includes the scores of 9,215 students not classified according to sex.

Equivalence of Scores in the 1928, 1929, 1930, and 1931 Editions

Percentile Rank

Scores	*1928*	*1929*	*1930*	*1931*
0–10	.000	.000	.000	.000
10–	.001	.001	.001	.000
20–	.005	.003	.005	.002
30–	.014	.007	.013	.006
40–	.030	.017	.028	.015
50–	.054	.033	.052	.031
60–	.086	.057	.084	.056
70–	.126	.093	.124	.091
80–	.174	.139	.174	.134
90–	.228	.194	.228	.181
100–	.287	.255	.287	.236
110–	.349	.322	.349	.295
120–	.413	.392	.413	.357
130–	.479	.461	.477	.421
140–	.544	.529	.541	.485
150–	.608	.596	.604	.548
160–	.669	.661	.665	.610
170–	.726	.721	.721	.669
180–	.778	.774	.772	.724
190–	.824	.822	.818	.776
200–	.864	.863	.858	.821
210	.897	.897	.892	.861
220–	.926	.925	.919	.896
230–	.947	.948	.942	.924
240–	.964	.965	.960	.946
250–	.977	.977	.973	.963
260–	.986	.986	.983	.975
270–	.992	.992	.990	.984
280–	.995	.995	.994	.991
290–	.997	.998	.997	.995
300–	.998	.999	.998	.998
310–	.999	.999	.999	.999
320–	.999	.999	.999	.999

Comparison of Men and Women

Inspection of the table of norms for the gross score and the medians and quartiles for the separate distributions for men and women shows that there is no significant difference between the scores of men and of women. A closer study of the norms for men and for women on the separate tests, however, shows that there are significant differences in some of the separate tests. On the Completion Test, the women make slightly higher scores than the men. On the Artificial Language Test, the women do considerably better, with a median score 10.5 higher than the men. On the Analogies Test there is no difference between the performances of the two groups. On the Arithmetic Test, the men do conspicuously better than the women, the difference in median scores being nine points. On the Opposites Test again the difference is very slightly in favor of the women. These differences between the two groups are interesting in the consistency of better scores of women on linguistic tests, and better performance by men on the more quantitative tests.

Equivalence of Successive Editions

The last table above shows that the gross scores in the 1928, 1929, and 1930 editions are directly comparable, but that the 1931 edition was somewhat easier than the previous three. This is shown clearly by the quartile points for the four years, which are summarized below.

	1928	*1929*	*1930*	*1931*
Lower Quartile.....	99	104	99	107
Median.....	138	141	139	147
Upper Quartile.....	179	180	181	190

It is likely that many of the colleges are raising their entrance requirements and gradually getting a better qualified group of students. This factor would raise the scores of freshmen in the psychological examination even if the difficulty of the test were the same.

A further check has been made by comparing the median scores for the 1930 and 1931 examinations of ninety-four colleges that submitted records both years. Five colleges had

the same median gross score for the two years, nineteen had higher scores on the 1930 examination, and seventy had higher scores on the 1931 edition. These facts indicate that the 1931 edition is somewhat easier than the 1930 edition.

This difference in difficulty was not at all expected. The tests, with the exception of the Analogies Test had been carefully equated in difficulty. A comparison of the medians in the separate tests for the 1930 and 1931 editions shows that no single test is responsible for the difference in gross scores for the two years.

	1930 *Median*	*1931* *Median*
Completion	30.00	28.36
Artificial Language	24.73	30.81
Analogies	23.51	29.08
Arithmetic	24.87	21.00
Opposites	33.52	33.62
Gross Scores	138.59	147.37

Changes in the 1932 Edition

The 1932 edition will be somewhat different from previous editions, but it is hoped that gross scores will be directly comparable to those of previous years. The changes to be made are only minor changes in the form of the tests to facilitate scoring. The same five tests will be used, and extensive standardizations of separate test questions for each test have been made or will be completed in time to construct tests comparable in difficulty to tests of previous years.

Reliability and Validity

Previous studies of reliability and validity have shown the reliability of the gross scores to be about .95 and the correlation between test scores and scholarship have averaged around .50 for a large number of colleges. The schools using the tests are making many studies of the value of them.

The Wisconsin Study

A recent bulletin of the University of Wisconsin prepared by V. A. C. Henmon and F. O. Holt is one of the best exam-

ples of the use being made of the Psychological Examination. Those interested in the validity of the tests and in the problem of selecting college students will find this report very interesting and valuable. The title of the bulletin is "A Report on the Administration of Scholastic Aptitude Tests to 34,000 High School Seniors in Wisconsin in 1929 and 1930."

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THELMA GWINN THURSTONE,
The University of Chicago.

American Universities and Colleges

IN 1928 Dr. David Allan Robertson prepared and published for the American Council a handbook of American Universities and Colleges. An edition of six thousand copies was printed and the book was out of print and unobtainable by the end of 1930. The Council made inquiry through its Executive Committee and found that it was the general consensus of opinion that the book was of great value to educational executives and supplied information not available in authoritative form in any other book of reference. Although the plates of the first edition were still in existence the Council determined that the value of such a book of reference was largely dependent on the recency of its statistics and that if a new edition was to be published the book should be completely revised and brought up-to-date. The Council secured a subvention from the General Education Board which made it financially possible to enter into an arrangement with the Williams and Wilkins Company of Baltimore for the publication of the book at $4. The book was completed and placed on sale February 29, 1932.

The plan of the first edition has been adhered to with considerable modification in Chapter V dealing with professional schools and in Chapter VI, dealing with graduate courses in the arts and sciences. The number of institutions accredited by the regional associations having been increased since 1928 by 126 institutions, the total number of statements of separate institutions in Part II is increased to 521. Forestry and Veterinary Medicine are added to the list of professions included in Chapter V, and the section on Theology is greatly enlarged.

Important new indexes have been added giving alpha-

betical lists of 2,602 full professors giving graduate instruction in the 29 universities which are members of the Association of American Universities, and of the names of 3,085 administrative officers named by the 521 institutions in their separate exhibits. An alphabetical index of learned journals and publications issued at institutions lists 416 titles. An index has been added of the institutions arranged by geographical location and also an index of institutions by church relationship.

Of the 521 institutions included in the volume 157 are tax supported institutions, 258 report themselves as affiliated with some church, and 106 are privately supported and controlled. The list of kinds of degrees conferred by American institutions is given in Appendix XVII and numbers 170.

A chapter in the Appendix is devoted to a full description of the organization and work of the Library of Congress, prepared by the Library, and another chapter describes the work of the Brookings Institution of Washington, as these institutions are unique in the American system. A brief summary of the work of the United States Office of Education, prepared by the Office, is included in Chapter I. The appendix includes the approved lists of the Association of American Universities, the Association of Colleges and Secondary Schools of the Middle States, the Association of Colleges and Secondary Schools of the Southern States, the New England Association of Colleges and Universities, the North Central Association of Colleges and Secondary Schools, and the Northwest Association of Secondary and Higher Schools, together with a statement of the standards of the Catholic Educational Association, the Association of Colleges for Negro Youth, and the American Association of Junior Colleges. A further list gives the names of institutions which are members of the American Council on Education. The list of approved Teachers Colleges is given in Chapter V. Other appendices give a list of fellowships and scholarships for foreign students and the statistics of foreign students in attendance in schools, colleges and universities in the United States.

Approved lists of medical schools, and hospitals for internes and graduate students, are given in Chapter V, while the opportunities for graduate study in the medical sciences leading to the degree of Doctor of Philosophy or Doctor of Science are given in Chapter VI. Statistics regarding law schools and requirements for admission to the bar in the various states, prepared by the Carnegie Foundation for the Advancement of Teaching, are given in Chapter V by permission of the Foundation. The statistics regarding doctors' degrees in the sciences conferred during the last ten years in the United States, prepared by the National Research Council, are given in Chapter VI.

President Robertson's admirable description of the American College, its organization and life, is reprinted as Chapter II, as is also his chapter on the American University and his chapter on the Foreign Student in the United States.

The seal of the American Council appears for the first time on the title page, the Council having been formally incorporated in May, 1931, after thirteen years' operation as a voluntary association. The entire volume makes a book of 1,080 pages of royal octavo size.

Orders for the book should be addressed to the Williams and Wilkins Company, Baltimore, Maryland, or to local booksellers.

The Council acknowledges with gratitude the ungrudging coöperation of the Universities, Colleges, Foundations and Associations, without whose help the prompt assembling of the material would have been impossible.

JOHN H. MACCRACKEN.

Accredited Higher Institutions

IN 1924 the American Council on Education approved and published two reports of its Committee on Standards, recommending uniform standards as criteria for accrediting colleges, teacher-training institutions and junior colleges. Since then the various regional associations have worked continuously on this problem, have revised their respective lists each year and are gradually working toward uniform standards.

The following list is merely a compilation as of April 1, 1932, of the lists of the established accrediting agencies; namely, the Association of American Universities, the Association of Colleges and Preparatory Schools of the Middle States, the Association of Colleges and Secondary Schools of the Southern States, the North Central Association of Colleges and Secondary Schools and the Northwest Association of Secondary and Higher Schools.

In the New England Association of Colleges and Secondary Schools, the standards set up for institutional membership are equivalent to those required for accrediting by the other regional associations. Therefore the institutional members of the New England Association are also included in this list.

It will be noted that the five regional associations of colleges and secondary schools just mentioned cover among them the entire United States with the exception of the far southwest. Hence institutions in that region would not appear in the following list unless they appear on the list of the Association of American Universities, which is a national list.

The American Council on Education has printed as a separate pamphlet its recommendations concerning standards for accrediting higher institutions. Copies of this pamphlet and of the accompanying list will be sent without charge on request, addressed to the office of the Council.

ALABAMA

Alabama College, Montevallo
Alabama Polytechnic Institute, Auburn
Birmingham-Southern College, Birmingham
Howard College, Birmingham
Judson College, Marion
Spring Hill College, Spring Hill
Talladega College, Talladega
University of Alabama, University
Woman's College of Alabama, Montgomery

ARIZONA

Arizona State Teachers College, Flagstaff
Arizona State Teachers College, Tempe
University of Arizona, Tucson

ARKANSAS

Arkansas State Teachers College, Conway
College of the Ozarks, Clarksville
Hendrix College, Conway
University of Arkansas, Fayetteville

CALIFORNIA

California Institute of Technology, Pasadena
Claremont Colleges (Pomona; Scripps) Claremont
College of the Holy Names, Oakland
College of the Pacific, Stockton
Dominican College of San Rafael, San Rafael
Immaculate Heart College, Hollywood
Mills College, Oakland

Occidental College, Los Angeles
St. Mary's College, St. Mary's
Stanford University, Stanford University
University of California, Berkeley
University of California, Los Angeles
University of Redlands, Redlands
University of Southern California, Los Angeles
Whittier College, Whittier

COLORADO

Colorado Agricultural College, Fort Collins
Colorado College, Colorado Springs
Colorado School of Mines, Golden
Colorado State Teachers College, Greeley
Loretto Heights College, Denver
University of Colorado, Boulder
University of Denver, Denver
Western State Teachers College, Gunnison

CONNECTICUT

Albertus Magnus College, New Haven
Connecticut Agricultural College, Storrs
Connecticut College for Women, New London
Trinity College, Hartford
Wesleyan University, Middletown
Yale University, New Haven

DELAWARE

University of Delaware, Newark

DISTRICT OF COLUMBIA

American University, Washington, D. C.
Catholic University of America, Washington, D. C.
George Washington University, Washington, D. C.
Georgetown University, Washington, D. C.
Howard University, Washington, D. C.
Trinity College, Washington, D. C.

FLORIDA

Florida State College for Women, Tallahassee
Rollins College, Winter Park
University of Florida, Gainesville

GEORGIA

Agnes Scott College, Decatur
Brenau College, Gainesville
Emory University, Atlanta
Georgia School of Technology, Atlanta
Georgia State College for Women, Milledgeville
Georgia State Teachers College, Athens
Georgia State Woman's College, Valdosta
Mercer University, Macon
Shorter College for Women, Rome
University of Georgia, Athens
Wesleyan College, Macon

HAWAII

University of Hawaii, Honolulu

IDAHO

College of Idaho, Caldwell
University of Idaho, Moscow

ILLINOIS

Armour Institute of Technology, Chicago
Augustana College and Theological Seminary, Rock Island
Bradley Polytechnic Institute, Peoria
Carthage College, Carthage
De Paul University, Chicago
Eureka College, Eureka
Illinois College, Jacksonville
Illinois State Normal University, Normal
Illinois State Normal University (Southern), Carbondale
Illinois State Teachers College (Eastern), Charleston
Illinois State Teachers College (Northern), De Kalb
Illinois State Teachers College (Western), Macomb
Illinois Wesleyan University, Bloomington
James Millikin University, Decatur
Knox College, Galesburg
Lake Forest College, Lake Forest
Lewis Institute, Chicago
Loyola University, Chicago
MacMurray College for Women, Jacksonville
McKendree College, Lebanon
Monmouth College, Monmouth
North Central College, Naperville
Northwestern University, Evanston
Rockford College, Rockford
Rosary College, River Forest
Shurtleff College, Alton
University of Chicago, Chicago
University of Illinois, Urbana
Wheaton College, Wheaton

INDIANA

Ball State Teachers College, Muncie
Butler University, Indianapolis
De Pauw University, Greencastle
Earlham College, Richmond
Evansville College, Evansville
Franklin College of Indiana, Franklin
Hanover College, Hanover
Indiana State Teachers College, Terre Haute
Indiana University, Bloomington
Manchester College, North Manchester
Purdue University, Lafayette
Rose Polytechnic Institute, Terra Haute
St. Mary's College, Notre Dame

St. Mary of the Woods College, St. Mary of the Woods
University of Notre Dame du Lac, Notre Dame
Valparaiso University, Valparaiso
Wabash College, Crawfordsville

IOWA

Clarke College, Dubuque
Coe College, Cedar Rapids
Columbia College of Dubuque, Dubuque
Cornell College, Mt. Vernon
Drake University, Des Moines
Grinnell College, Grinnell
Iowa State College of Agriculture and Mechanic Arts, Ames
Iowa State Teachers College, Cedar Falls
Luther College, Decorah
Morningside College, Sioux City
Parsons College, Fairfield
St. Ambrose College, Davenport
Simpson College, Indianola
University of Dubuque, Dubuque
University of Iowa, Iowa City

KANSAS

Baker University, Baldwin
Bethany College, Lindsborg
College of Emporia, Emporia
Fort Hays Kansas State College, Hays
Friends University, Wichita
Kansas State College of Agriculture and Applied Science, Manhattan
Kansas State Teachers College of Emporia, Emporia
Kansas State Teachers College, Pittsburg
Marymount College, Salina
Municipal University of Wichita, Wichita
Ottawa University, Ottawa
Southwestern College, Winfield
St. Benedict's College, Atchison
Sterling College, Sterling
University of Kansas, Lawrence
Washburn College, Topeka

KENTUCKY

Berea College, Berea
Centre College of Kentucky, Danville
Eastern Kentucky State Teachers College, Richmond
Georgetown College, Georgetown
Morehead State Teachers College, Morehead
Murray State Teachers College, Murray
Transylvania College, Lexington
University of Kentucky, Lexington
University of Louisville, Louisville
Western Kentucky State Teachers College, Bowling Green

LOUISIANA

Centenary College of Louisiana, Shreveport
Louisiana College, Pineville
Louisiana Polytechnic Institute, Ruston
Louisiana State University, Baton Rouge
Loyola University, New Orleans
Newcomb College, New Orleans
Southwestern Louisiana Institute, Lafayette
State Normal College, Natchitoches
Tulane University of Louisiana, New Orleans

MAINE

Bates College, Lewiston
Bowdoin College, Brunswick
Colby College, Waterville
University of Maine, Orono

MARYLAND

College of Notre Dame of Maryland, Baltimore
Goucher College, Baltimore
Hood College, Frederick
Johns Hopkins University, Baltimore
Loyola College, Baltimore
Morgan College, Baltimore
Mt. St. Mary's College, Emmitsburg
St. John's College, Annapolis
St. Joseph's College, Emmitsburg
United States Naval Academy, Annapolis
University of Maryland, College Park
Washington College, Chestertown
Western Maryland College, Westminster

MASSACHUSETTS

Amherst College, Amherst
Boston College, Chestnut Hill
Boston University, Boston
Clark University, Worcester
College of the Holy Cross, Worcester
Harvard University, Cambridge
International Y. M. C. A. College, Springfield
Massachusetts Institute of Technology, Cambridge
Massachusetts State College, Amherst
Mt. Holyoke College, South Hadley
Radcliffe College, Cambridge
Simmons College, Boston
Smith College, Northampton
Tufts College, Medford
Wellesley College, Wellesley
Wheaton College, Norton
Williams College, Williamstown
Worcester Polytechnic Institute, Worcester

MICHIGAN

Albion College, Albion
Alma College, Alma

Battle Creek College, Battle Creek
Calvin College, Grand Rapids
Colleges of the City of Detroit, Detroit
Hillsdale College of Michigan, Hillsdale
Hope College, Holland
Kalamazoo College, Kalamazoo
Marygrove College, Detroit
Michigan College of Mining and Technology, Houghton
Michigan State College of Agriculture and Applied Science, East Lansing
Michigan State Normal College, Ypsilanti
Michigan State Teachers College, (Central), Mount Pleasant
Michigan State Teachers College (Western), Kalamazoo
Michigan State Teachers College (Northern), Marquette
University of Detroit, Detroit
University of Michigan, Ann Arbor

MINNESOTA

Carleton College, Northfield
College of St. Catherine, St. Paul
College of St. Scholastica, Duluth
College of St. Teresa, Winona
College of St. Thomas, St. Paul
Concordia College, Moorhead
Gustavus Adolphus College, St. Peter
Hamline University, St. Paul
Macalester College, St. Paul
St. Olaf College, Northfield
University of Minnesota, Minneapolis

MISSISSIPPI

Blue Mountain College, Blue Mountain
Delta State Teachers College, Cleveland
Millsaps College, Jackson
Mississippi College, Clinton
Mississippi Woman's College, Hattiesburg

MISSOURI

Central College, Fayette
Culver-Stockton College, Canton
Drury College, Springfield
Lindenwood College, St. Charles
Missouri State Teachers College (Central), Warrensburg
Missouri State Teachers College (Northeast), Kirksville
Missouri State Teachers College (Northwest), Maryville
Missouri State Teachers College (Southeast), Cape Girardeau
Missouri State Teachers College (Southwest), Springfield
Missouri Valley College, Marshall
Park College, Parkville
St. Louis University, St. Louis
Tarkio College, Tarkio
University of Missouri, Columbia
Washington University, St. Louis
Webster College for Women, Webster Groves
Westminster College, Fulton
William Jewell College, Liberty

MONTANA

Montana State College, Bozeman
Mt. St. Charles College, Helena
State University of Montana, Missoula

NEBRASKA

Creighton University, Omaha
Doane College, Crete
Hastings College, Hastings
Nebraska Wesleyan University, Lincoln
University of Nebraska, Lincoln

NEVADA

University of Nevada, Reno

NEW HAMPSHIRE

Dartmouth College, Hanover
University of New Hampshire, Durham

NEW JERSEY

College of St. Elizabeth, Convent Station
Georgian Court College, Lakewood
New Jersey College for Women, New Brunswick
Princeton University, Princeton
Rutgers University, New Brunswick
Stevens Institute of Technology, Hoboken

NEW MEXICO

New Mexico College of Agriculture and Mechanic Arts, State College
New Mexico State Teachers College, Silver City
University of New Mexico, Albuquerque

NEW YORK

Adelphi College, Garden City
Alfred University, Alfred
Barnard College, New York City
Canisius College of Buffalo, Buffalo
City College, New York City
Clarkson School of Technology, Potsdam
Colgate University, Hamilton
College of Mt. St. Vincent, Mt. St. Vincent-on-Hudson
College of New Rochelle, New Rochelle
College of the Sacred Heart, New York City
College of St. Rose, Albany
Columbia University, New York City
Cornell University, Ithaca
D'Youville College, Buffalo
Elmira College, Elmira
Fordham University, Fordham
Good Counsel College, White Plains
Hamilton College, Clinton

Hobart College, Geneva
Hunter College of the City of New York, New York City
Keuka College, Keuka Park
Manhattan College, New York City
Marymount College, Tarrytown-on-Hudson
Nazareth College, Rochester
New York State College for Teachers, Albany
New York University, New York City
Niagara University, Niagara
Polytechnic Institute of Brooklyn, Brooklyn
Rensselaer Polytechnic Institute, Troy
Russell Sage College, Troy
St. Bonaventure's College and Seminary, St. Bonaventure
St. John's College, Brooklyn
St. Joseph's College for Women, Brooklyn
St. Lawrence University, Canton
St. Stephen's College, Annandale
Skidmore College, Saratoga Springs
Syracuse University, Syracuse
Union College, Schenectady
United States Military Academy, West Point
University of Buffalo, Buffalo
University of Rochester, Rochester
Vassar College, Poughkeepsie
Wagner Memorial Lutheran College, Staten Island
Wells College, Aurora
William Smith College, Geneva

NORTH CAROLINA

Catawba College, Salisbury
Davidson College, Davidson
Duke University, Durham
East Carolina State Teachers College, Greenville
Greensboro College, Greensboro
Guilford College, Guilford College
Lenoir-Rhyne College, Hickory
Meredith College, Raleigh
North Carolina College for Women, Greensboro
North Carolina State College of Agriculture and Engineering, Raleigh
Salem College, Winston-Salem
University of North Carolina, Chapel Hill
Wake Forest College, Wake Forest

NORTH DAKOTA

Jamestown College, Jamestown
North Dakota Agricultural College, Fargo
University of North Dakota, Grand Forks

OHIO

Antioch College, Yellow Springs
Ashland College, Ashland
Baldwin Wallace College, Berea
Bowling Green State College, Bowling Green
Capital University, Columbus
Case School of Applied Science, Cleveland
College of Mt. St. Joseph on the Ohio, Mt. St. Joseph
College of Wooster, Wooster
Denison University, Granville
Heidelberg College, Tiffin
Hiram College, Hiram
John Carroll University, Cleveland
Kenyon College, Gambier
Lake Erie College, Painesville
Marietta College, Marietta
Miami University, Oxford
Mt. Union College, Alliance
Muskingum College, New Concord
Notre Dame College, South Euclid
Oberlin College, Oberlin
Ohio State University, Columbus
Ohio University, Athens
Ohio Wesleyan University, Delaware
Otterbein University, Westerville
University of Akron, Akron
University of Cincinnati, Cincinnati
University of the City of Toledo, Toledo
University of Dayton, Dayton
Ursuline College, Cleveland
Western College, Oxford
Western Reserve University, Cleveland
Wittenberg College, Springfield
Xavier University, Cincinnati

OKLAHOMA

Oklahoma Agricultural and Mechanical College, Stillwater
Oklahoma College for Women, Chickasha
Phillips University, Enid
University of Oklahoma, Norman
University of Tulsa, Tulsa

OREGON

Albany College, Albany
Linfield College, McMinville
Marylhurst College, Oswego
Oregon State Agricultural College, Corvallis
Pacific University, Forest Grove
Reed College, Portland
University of Oregon, Eugene
Willamette University, Salem

PENNSYLVANIA

Albright College, Reading
Allegheny College, Meadville
Bryn Mawr College, Bryn Mawr

Bucknell University, Lewisburg
Carnegie Institute of Technology, Pittsburgh
Dickinson College, Carlisle
Drexel Institute, Philadelphia
Franklin and Marshall College, Lancaster
Geneva College, Beaver Falls
Gettysburg College, Gettysburg
Grove City College, Grove City
Haverford College, Haverford
Immaculata College, Immaculata
Juniata College, Huntingdon
Lafayette College, Easton
LaSalle College, Philadelphia
Lebanon Valley College, Annville
Lehigh University, Bethlehem
Lincoln University, Lincoln University
Marywood College, Scranton
Mercyhurst College, Erie
Moravian College and Theological Seminary, Bethlehem
Mt. St. Joseph College, Philadelphia
Muhlenberg College, Allentown
Pennsylvania College for Women, Pittsburgh
Pennsylvania State College, State College
Rosemont College, Rosemont
St. Joseph's College, Philadelphia
St. Thomas College, Scranton
St. Vincent College, Latrobe
Seton Hill College, Greensburg
Susquehanna University, Selinsgrove
Swarthmore College, Swarthmore
Temple University, Philadelphia
Thiel College, Greenville
University of Pennsylvania, Philadelphia
University of Pittsburgh, Pittsburgh
Ursinus College, Collegeville
Villanova College, Villanova
Washington and Jefferson College, Washington
Westminster College, New Wilmington
Wilson College, Chambersburg

RHODE ISLAND

Brown University, Providence
Pembroke College, Providence
Rhode Island State College, Kingston

SOUTH CAROLINA

Clemson Agricultural College of South Carolina, Clemson
Coker College, Hartsville
College of Charleston, Charleston
Converse College, Spartanburg
Erskine College, Due West
Furman University, Greenville
Limestone College, Gaffney
Presbyterian College of South Carolina Clinton
The Citadel, Charleston
University of South Carolina, Columbia
Winthrop College, Rock Hill
Wofford College, Spartanburg

SOUTH DAKOTA

Augustana College, Sioux Falls
Dakota Wesleyan University, Mitchell
Huron College, Huron
South Dakota State College of Agriculture and Mechanic Arts, Brookings
South Dakota State School of Mines, Rapid City
University of South Dakota, Vermillion
Yankton College, Yankton

TENNESSEE

Carson-Newman College, Jefferson City
Fisk University, Nashville
George Peabody College for Teachers, Nashville
Maryville College, Maryville
Southwestern, Memphis
Tennessee State Teachers College, Johnson City
Tennessee State Teachers College, Memphis
Tennessee State Teachers College, Murfreesboro
Tusculum College, Greeneville
University of Chattanooga, Chattanooga
University of the South, Sewanee
University of Tennessee, Knoxville
Vanderbilt University, Nashville

TEXAS

Agricultural and Mechanical College of Texas, College Station
Baylor College for Women, Belton
Baylor University, Waco
East Texas State Teachers College, Commerce
Incarnate Word College, San Antonio
North Texas State Teachers College, Denton
Our Lady of the Lake College, San Antonio
Rice Institute, Houston
Sam Houston State Teachers College Huntsville
Simmons University, Abilene
Southern Methodist University, Dallas
Southwest Texas State Teachers College, San Marcos
Southwestern University, Georgetown
Stephen F. Austin State Teachers College, Nagadoches
Sul Ross State Teachers College, Alpine

Texas Christian University, Fort Worth
Texas College of Arts and Industries, Denton
Texas Technological College, Lubbock
Trinity University, Waxahachie
University of Texas, Austin
West Texas State Teachers College, Canyon

UTAH

Brigham Young University, Provo
University of Utah, Salt Lake City
Utah Agricultural College, Logan

VERMONT

Middlebury College, Middlebury
University of Vermont, Burlington

VIRGINIA

Bridgewater College, Bridgewater
College of William and Mary in Virginia, Williamsburg
Emory and Henry College, Emory
Hampden-Sydney College, Hampden-Sydney
Lynchburg College, Lynchburg
Mary Baldwin College, Staunton
Randolph-Macon College for Men, Ashland
Randolph-Macon Woman's College, Lynchburg
Roanoke College, Salem
State Teachers College, East Radford
State Teachers College, Farmville
State Teachers College, Fredericksburg
State Teachers College, Harrisonburg
Sweet Briar College, Sweet Briar
University of Richmond, Richmond
University of Virginia, Charlottesville
Virginia Military Institute, Lexington
Virginia Agricultural College and Polytechnic Institute, Blacksburg
Washington and Lee University, Lexington

WASHINGTON

College of Puget Sound, Tacoma
Gonzaga University, Spokane
State College of Washington, Pullman
University of Washington, Seattle
Whitman College, Walla Walla

WEST VIRGINIA

Bethany College, Bethany
Concord State Teachers College, Athens
Marshall College, Huntington
West Virginia State College, Institute
West Virginia University, Morgantown

WISCONSIN

Beloit College, Beloit
Carroll College, Waukesha
Lawrence College, Appleton
Marquette University, Milwaukee
Milwaukee-Downer College, Milwaukee
Mount Mary College, Milwaukee
Ripon College, Ripon
Stout Institute, Menomonie
University of Wisconsin, Madison
Wisconsin State Teachers College, La-Crosse
Wisconsin State Teachers College, Milwaukee
Wisconsin State Teachers College, Oshkosh

WYOMING

University of Wyoming, Laramie

Teachers' Colleges

CALIFORNIA

State Teachers College, San Diego

IDAHO

State Normal School, Albion
State Normal School, Lewiston

MINNESOTA

State Teachers' College, Moorhead
State Teachers' College, Winona
St. Cloud State Teachers' College, St. Cloud

MISSOURI

Harris Teachers' College, St. Louis
Lincoln University, Jefferson City

MONTANA

State Normal School, Dillon

NEBRASKA

State Normal School and Teachers' College, Chadron
State Normal School and Teachers' College, Kearney
State Normal School and Teachers' College, Peru
State Normal School and Teachers' College, Wayne

NORTH DAKOTA

North Dakota State Normal School, Dickinson
State Normal and Industrial School, Ellendale
State Normal School, Mayville
State Teachers' College, Valley City
Teachers' College, Minot

OHIO

State Normal College, Bowling Green
State Normal College, Kent

OKLAHOMA

Central State Teachers' College, Edmond
East Central State Teachers' College, Ada
Northeastern State Teachers' College, Tahlequah
Northwestern State Teachers' College, Alva
Southeastern State Teachers' College, Durant
Southwestern State Teachers' College, Weatherford

OREGON

Eastern Oregon State Normal School—La Grande
Southern Oregon Normal School, Ashland
State Normal School, Monmouth

SOUTH DAKOTA

North Normal and Industrial School, Aberdeen
State Normal School, Madison
South Dakota State Normal School, Spearfish

WASHINGTON

State Normal School, Bellingham
State Normal School, Cheney
State Normal School, Ellensburg

WEST VIRGINIA

West Virginia State Normal School, Fairmont

WISCONSIN

State Normal School, Superior

Junior Colleges

ALABAMA

Marion Institute, Marion

ARIZONA

Phoenix Junior College, Phoenix

ARKANSAS

Arkansas Agricultural and Mechanical College, Jonesboro
Arkansas Agricultural and Mechanical College, Monticelli
Arkansas Polytechnic Institute, Russellville
Central Junior College, Conway
Little Rock Junior College, Little Rock
State Agricultural and Mechanical College, Magnolia

COLORADO

Colorado Women's College, Denver
Regis College, Denver

CONNECTICUT

Junior College of Connecticut, Bridgeport

FLORIDA

St. Petersburg Junior College, St. Petersburg

GEORGIA

Andrew College, Cuthbert
Junior College of Augusta, Augusta

IDAHO

University of Idaho, Southern Branch, Pocatello
Northwest Nazarene College, Nampa

ILLINOIS

Blackburn College, Carlinville
Crane Junior College, Chicago
Elmhurst College, Elmhurst
Frances Shimer School, Mount Carrol
Joliet Junior College, Joliet
La Salle-Peru-Oglesby Junior College, La Salle
Lincoln College, Lincoln
Lyons Township Junior College, La Grange
Monticello Seminary, Godfrey
Morton Junior College, Cicero
North Park Junior College, Chicago
Y. M. C. A. School of Liberal Arts, Chicago

INDIANA

St. Joseph's College, Collegeville

IOWA

Graceland College, Lamoni
Mason City Junior College, Mason City
Mt. Mercy Junior College, Cedar Rapids
Ottumwa Heights College, Ottumwa

KANSAS

St. Mary College, The, Leavenworth

KENTUCKY

Bethel Woman's College, Hopkinsville
Cumberland College, Williamsburg
Nazareth Junior College, Nazareth
Pikeville College, Pikeville

MASSACHUSETTS

Junior College of Bradford Academy, Bradford
Lasell Seminary, Auburndale

MICHIGAN

Bay City Junior College, Bay City
Emmanuel Missionary College, Berrien Springs
Flint Junior College, Flint
Grand Rapids Junior College, Grand Rapids
Highland Park Junior College, Highland Park
Muskegon Junior College, Muskegon
Port Huron Junior College, Port Huron

MINNESOTA
Duluth Junior College, Duluth
Eveleth Junior College, Eveleth
Hibbing Junior College, Hibbing
Rochester Junior College, Rochester
Virginia Junior College, Virginia

MISSISSIPPI
Gulf Park College, Gulfport
Harrison-Stone-Jackson Agricultural High School and Junior College, Perkinston
Hinds County Junior College, Raymond
Pearl River College, Poplarville
Sunflower County Junior College, Moorhead
Whitworth College, Brookhaven

MISSOURI
Christian College, Columbia
Flat River Junior College, Flat River
Junior College of Kansas City, Kansas City
Kemper Military School, Boonville
The Principia, St. Louis
St. Joseph Junior College, St. Joseph
Stephens Junior College, Columbia
Teachers College of Kansas City, Kansas City
Wentworth Military Academy, Lexington
William Woods College, Fulton

MONTANA
Intermountain Union College, Helena
Mt. St. Charles College, Helena

NEBRASKA
Union College, College View

NORTH CAROLINA
Mars Hill College, Mars Hill
St. Mary's School, Raleigh

OKLAHOMA
Northeastern Oklahoma Junior College, Miami
Panhandle Agricultural and Mechanical College, Goodwill

OREGON
Mt. Angel College, St. Benedict

SOUTH DAKOTA
Sioux Falls College, Sioux Falls

TENNESSEE
Hiwassee College, Madisonville
Nashville Agricultural Normal Institute, Madison
Tennessee Wesleyan College, Athens
Ward Belmont College, Nashville

TEXAS
Brownsville Junior College, Brownsville
John Tarleton Agricultural College Stephenville
Lon Morris College, Jacksonville
South Park College, Beaumont
Taxarkana Junior College, Texarkana
Tyler Junior College, Tyler

VIRGINIA
Averett College, Danville
Sullins College, Bristol
Virginia Intermont College, Bristol

WEST VIRGINIA
Potomac State School, Keyser

ADDENDA

The following institutions were accredited by the Northwest Association of Secondary and Higher Schools at its meeting April 9, 1932, but were received too late to be included in the foregoing list. They should be so included.

CALIFORNIA
Loyola University, Los Angeles
University of Santa Clara, Santa Clara
University of San Francisco, San Francisco

MONTANA
Montana State School of Mines, Butte
Montana State Normal School, Dillon

Junior Colleges

CALIFORNIA
Pacific Union College, Angwin

UTAH
Snow College, Ephraim
Weber College, Ogden

MONTANA
Northern Montana College, Havre

WASHINGTON
Walla Walla College, College Place

Teachers Colleges

MONTANA
Eastern Montana Normal School, Billings

OREGON
Marylhurst Normal School, Oswego

WASHINGTON
Holy Names Normal School, Spokane